



**PATTERN OF GROWTH AND ITS IMPACT ON
POVERTY AND EMPLOYMENT IN THE
INDIAN ECONOMY SINCE 1991**

ABSTRACT

THESIS

SUBMITTED FOR THE AWARD OF THE DEGREE OF

Doctor of Philosophy

IN

ECONOMICS

BY

MD IMDADUL HAQUE

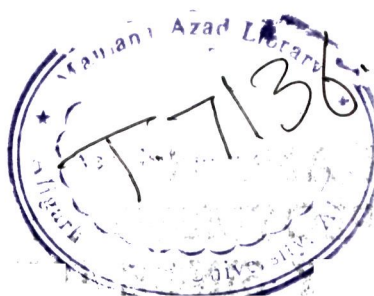
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2008



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ACKNOWLEDGEMENT

I am highly indebted to my supervisor Dr. S.M Jawed Akhtar, Reader, Department of Economics, A.M.U, Aligarh, for his involvement in this endeavor and his support and encouragement throughout the study. This piece of work would not have become a reality without his directions and guidance. I shall remain ever obliged to him.

I owe my thanks to Prof. Abdul Wahab, Chairman, Department of Economics for providing academic support required in the completion of this work and all my teachers for their cooperation and encouragement. I would particularly like to thank Dr. Nisar A. Khan and Dr. Abdus Salam, who taught me Econometrics and Mathematical economics respectively. In this course of work, I have considerably benefited from discussions and suggestions of Prof. Naseem A. Zaidi and Dr. Syed Noman Ahmad.

I also owe a debt of gratitude to my seniors Dr. Dastagir Alam, Dr. Firdous Ahmad and Mr. Jamil Ahmad for their cooperation. I am also thankful to my friends Mr. Abdullah Faiz, Mr. Imran, Mr. Fakhre Alam, Mr. Shareef and Mr. Fazlur Rehman. I also express my gratitude to Mr. Bilal Habib, Research Scholar, Department of Wildlife Science, for his help in data analysis. I am equally thankful to all the staff members of ICFAI, particularly Dr. Rumzi Tausif, for his moral support.

I am also obliged to all the staff members of Seminar Library, Department of Economics, A.M.U; Maulana Azad Library, A.M.U; NCAER Library, Delhi; Ratan Tata Library, D.S.E, Delhi and Exim Bank, J.N.U, New Delhi.

Lastly, I take this as an opportunity to pay love and respect to my loving parents and my wife, and I dedicate this work to my little daughter, Sadia.

Md Imdadul Haque
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ABBREVIATIONS

ADR: American Depository Receipts
BIFR: Board for Industrial and Financial Reconstruction
BPL: Below Poverty Line
CMIE: Centre for Monitoring Indian Economy
CPI (AL): Consumer Price Index of Agricultural Labourers
CPI (IW): Consumer Price Index of Industrial Workers
CSO: Central Statistical Organization
GDP: Gross Domestic Product
GDR: Global Depository Receipts
GNP: Gross National Product
HDI: Human Development Index
HDR: Human Development Report
IIP: Index of Industrial Production
IRDA: Insurance Regulatory Authority of India
LDC: Less Developed Countries
M&A: Mergers and Acquisitions
MRP: Mixed Recall Period
NNP: Net National Product
NSDP: Net State Domestic Product
NSSO: National Sample Survey Organization
PPP: Purchasing Power Parity
SARFESI: Securitization and Reconstruction of Financial Assets and
Enforcement of Security Interest
SICA: Sick Industries Companies Act
TRAI: Telecom Regulatory Authority of India
UNDP: United Nations Development Programme
URP: Uniform Recall Period
VAT: Value Added Tax
WDR: World Development Report

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CHAPTER-I

INTRODUCTION

INTRODUCTION

India is changing at a very fast rate since the past decade. It may be that India is not in the league of developed nations but surely in terms of the rate of growth it is no less than many a big economies. The reforms since 1991 have led to the formation of a vibrant economy populated by a dynamic middle class mainly in towns and cities which include a brand new generation of executive, businessman and industrialists who have not only started excelling themselves but have also began to compete in global market. Whatever be the field, be it Science and Technology, be it Information Communication and Technology, be it Business Process Outsourcing, be it Knowledge Process Outsourcing, India now has a name of its own. India is no more a poor country of village people; rather it is now a brand of its own. Not only economically but politically also, India has become more important and more strategic as is evident from India's initiatives for a permanent seat in UN Security Council or from the Indo-US Nuclear deal or from the quality and quantity of substantial trade and bilateral cooperation in science and technology with US and Europe. Economically, the GDP growth trend has transformed from the so called 'Hindu' rate of growth of 3.5 percent per annum to 8 to 9 percent growth per annum nowadays. Even the two digit growth rate seems plausible now and that too the maximum contributions to GDP comes from a much diversified and technologically advanced manufacturing and service sectors. From a

poor and static country of villages India has graduated into a country where technology is getting rapidly upgraded, competition becoming fiercer, thereby ultimately profiting the consumers and a dynamic IT industry providing all information. With the quantitative restrictions on imports being removed, custom duties progressively lowered and both direct and portfolio foreign investment lowered, export performance has buoyed leading to a surplus in the current account and a strong balance of payment position. The days of scarcities are gone: food grains are in abundance, foreign exchanges are in abundance and investments are in plenty.

But as to whether the poor are included in this changing scenario, is an important question. While on one hand metros propound the virtues of emerging super power status of Indian state, the country-side on the other hand is suffering acutely from the withdrawal syndrome. No one doubts growth, but whether this growth is inclusive or not or whether this growth is devoid of equality. If the situation is so that neither everyone is participating, particularly the poor and disadvantaged groups, nor everyone is benefiting from the growth then this variance in the spread effects of the growth process is as serious as no growth altogether. This problematic phenomenon could be understood by studying the relationship between growth, poverty and employment. It is now a well known accepted fact that growth itself is not enough, if it doesn't produces such flow of benefits which aren't widespread. We need

a growth process which raises the incomes of the poor, which generates quality employment while ensuring essential services like education and health to one and all. In other words, we can say that we need growth which is more inclusive. The Indian economy, though still backward, is no longer caught in a 'low level equilibrium trap' where it remained for a long period under the British. Since Independence, it has recorded a significant increase in the national income, though one cannot be equally sure of the trickle down benefits of growth. We further notice that the Indian economy during the past five decades has progressed structurally when we consider the growth of capital goods industries, expansion of infrastructure, performance of the public sector, changes in the financial organization and the progressive transformation of the agrarian scene. These factors over the years are believed to have created an element of dynamism in the country's economy and one can hopefully say that it would sustain development in the future.

1 (I) THE ECONOMIC SCENARIO:

The nineties have been a decade of changes in the India's economic structure and policies. Ever since the country gained its Independence in 1947 the economic structure was based on the belief that comprehensive planning combined with direct participation and control of economic activity by the state are both necessary and desirable to achieve rapid economic growth, poverty eradication, employment generation and a just and equitable society. This belief is manifested in the planning structure

of India characterized by its Five Year Plans and heavy dependence on State. Although many economists have criticized excessive state involvement and interference, obsession with heavy industries and highly autarkic policies on ground that they made the system rigid, reduced their capacity for flexible adaptation to changing condition and inhibited innovations but the economic, social and political condition that India inherited at the time of Independence was is no way ripe for a full market oriented capitalist structure of economy. It is highly irrational on part of anybody to blame the initial policymakers in this respect. On the contrary India was rather smart enough to absorb the ideologies of both the capitalist and the socialist structure, with the pure motive of drawing out the good things from both of them. The development pattern up till 1990 was characterized by a strong decentralized planning, government owned basic industries, excessive regulations on the private sector, tariffs and quotas leading to trade protectionism accompanied by distrust towards foreign capital. It was characterized by quota, permit and license regime under the control of a strong bureaucracy. This led to an inward looking and import-substitution strategy to growth.

Despite the heavy planning, gross domestic product growth rate remained more or less stuck at 3-4 percent per annum. But this failure was not because of the policy making rather it is due to the poor implementation of it. No doubt democracy gave greater political voice to the poor, the compulsions of election politics made it imperative for

subsequent governments to launch direct attack on poverty and unemployment through special poverty alleviation programmes and commit substantial resources for them. But experience shows that they did not benefit the weak and the vulnerable class in full measure as expected. On the other hand, they have led to massive corruption and abuse of power by the functionaries and institutions of the State to further their own interest and the interests of the influential.

Meanwhile, by the seventies, the sharp contrast between India's performance and that of East Asian and South-East Asian countries began to attract increasing attention. The latter were achieving very high and historically unprecedented rates of growth of output and employment, and improvement in living standard. Their expansion was widely attributed to reliance on the market mechanism rather than state sponsored centralized planning, openness of their economies, a dynamic export trade and import of foreign capital modern technology.

The sharp contrast between the performances of these countries and that of India was instrumental in persuading the emerging generation of political and bureaucratic elite as well as the middle class that India's economic structure needed to reform. The collapse of the erstwhile Soviet Union and East European communist regimes further reinforced this trend. All this taken together with the comparatively lack luster achievement of India's own efforts at planned development gave credence to the notion that free market-free entry-free trade system,

would produce better results in terms of efficiency, growth of income and employment and reduction of poverty and led to some half hearted attempts at liberalization during the 1980s itself. The intellectual ground for reforms of the 1990's had thus been prepared much earlier. Limited as only liberalization during the eighties in which expansionist fiscal policy and larger investments in infrastructure pursued during the decade resulted in a significant improvement in the growth rate. But it was accompanied by a growing strain on government finances, degradation of balance of payments and rising prices and the implications of such a policy of larger public investments financed out of borrowing, especially high cost short term external borrowings subsequently led the economy to the crisis of 1991 and the final blow came with the exhaustion of foreign reserves resulting in government seeking external assistance.

This was a period when the philosophy of 'free market free trade and globalization' was being pushed aggressively on several crisis-ridden third world countries in the name of 'Structural Adjustment Programmes'. In India's case too the donors exerted strong pressure for far reaching changes in lines of the Washington Consensus. The reduction of fiscal deficits and balance of payments deficits and drastically reducing, if not total dismantling of controls on the private sector, cutting back public sector involvement, a strong push towards privatization of economy and allowing free flow of private foreign capital were among the initiatives

taken. To make matter worse the Gulf crisis in the late 1990 sharply accentuated macro economic problem. There was also political instability in the country at this juncture. All these developments together eroded international confidence in the Indian economy and, as a result, this country's credit rating in the international market declined sharply. However, it has to be recognized that the problems of the economy did not assume crisis proportions abruptly. These problems, on fact were very much there for years destroying the capacity of the economy to cope with any internal or external shocks and foreign exchange reserves dropped to levels which were not sufficient.

The working of the Indian economy particularly during the 1980s was characterized by growing macroeconomic imbalances in the shape of high fiscal deficit, high current account deficit, increasing external debt and weakening financial system. Large monetized deficit leading to fiscal deficit, ultimately led to increasing money supply and inflation. This spilled to the external sector resulting in unsustainable current account deficit and finally this huge public debt culminated into an external payment crisis in 1991. In response to the crises situation of 1990-91, the government decided to introduce economic policy reforms which consisted of two distinct strands - macro economic stabilization and structural reforms. Structural reforms deal with sectoral adjustment designed to tackle the problems in the supply side of the economy. And stabilization dealt with demand management. The constituents of

macroeconomic stabilization were mainly control of inflation, fiscal adjustment and balance of payment adjustments where as structural reforms constituted of trade and capital flows reforms, industrial deregulation, public sector reforms and disinvestment, and financial sector reforms. With the policy makers the thrust was to increase the efficiency and international competitiveness of industrial production, to utilize foreign investment and technology to a much greater degree than in the past, to prove the performance and rationalize the scope of the public sector, and to reform, and modernize the financial sector so that it can more efficiently serve the needs of the economy. These reforms aimed at the reorientation of the economy from a centralized and state controlled command economy to a market-oriented economy for further growth.

More than fifteen years have passed since these changes have taken place in the Indian economy. This study aims at evaluating the entire reform process on the broad aspects of growth, poverty and unemployment. Before gathering momentum on the evaluation part, here is a brief introduction of the reform process.

1 (II) ECONOMIC REFORMS IN INDIA:

The key elements of the reforms package included the following:

(i) Industrial Sector Reforms:

Opportunities and space for greater efficiency were sought to be enhanced by dismantling all controls over industrial investment, choice

of technology, scale and location of plants, production and pricing relaxing restrictions on foreign direct investment and adopting a proactive policy of wooing such investment. Almost all industrial licensing have been abolished. The restrictions under the Monopolies and Restrictive Practices (MRTP) Act has been reduced anti-trust concerns have been eased. Entry requirements for both private domestic and foreign players have been relaxed. Sectors like those of defence, power, airlines, telecommunications and mining, which were once under the total control of the state have been opened for all private participation.

(ii) External Sector Reforms:

Dismantling the import and export licensing system, reducing tariffs, and moving towards a more or less free trade regime to increase the pressure of competition and thereby induce domestic industry to increase efficiency. Quantitative restrictions were completely disbanded by 2001. The exchange rate system was transformed from a discretionary, basket packed system to a largely market determined exchange rate. Foreign investments particularly the foreign direct investments approvals are by and large made automatic. For liberalizing the operating environment for firms with foreign equity Foreign Exchange Regulation Act (FERA) was replaced by Foreign Exchange Management Act (FEMA). Further Attempts were made to promote the participation of foreign institutional investors in the secondary market in Indian stocks,

particularly through Global Depository Receipts (GDRs) and American Depository Receipts (ADRs).

(iii) Financial Sector Reforms:

The entire banking sector has been reformed particularly the non performing assets. This deregulation has been sensibly accompanied by more stringent prudential and capital adequacy norms. Private players have been allowed both in banks and in insurance sector. Foreign equity is also being encouraged. Interest rates are now largely deregulated, reserve requirements have been reduced and banks have been given greater autonomy in its operations. The office of the Controller of Capital Issues, which regulated the IPOs have been abolished making firms free to price their own equity. The recognition of SEBI as an apex body in the financial field has properly regulated and organized among many other things the discrepancies and uncertainties in the share market making an environment conducive for not only big players but also for small investors. Mutual fund operators and Indian firms are now allowed to raise funds from offshore-markets through global depository rights and capital markets have been opened for foreign institutional investors, though in a small manner.

(iv) Macro Economic Stabilization and Structural Reforms:

Macro economic stabilization dealt with demand management and structural reforms dealt with sectoral adjustment designed to tackle the problems in the supply side of the economy. These reforms were targeted

at the macro economic variables of the economy. Some of the aspects of macro economic stabilization were control of inflation and a strict control over money supply, reducing the government fiscal deficit, tax reform to raise revenue, cutting implicit and explicit subsidies on food fertilizers and export, improving the balance of payments situation, and compressing and reorienting public sector plan expenditure. Structural reforms constituted of trade and capital flows reforms, industrial deregulation, public sector reforms and disinvestment, and financial sector reforms.

(iv) Second Generation Reforms:

These reform measures have been dubbed as the First Generation Reforms and these were by and large administrative reforms and did not require any legal and institutional changes. But there were many areas which were not covered by these reforms which were subsequently put in place like the state level reforms: which included power sector, states being given authority to attract foreign investment in certain sectors etc. and agricultural reforms like lifting of Essential Commodities Act, Institutional reforms like changes in Board of Industrial and Financial Reconstruction (BIFR) and Sick Industries Companies Act (SICA), Value Added Tax (VAT), Telecom Regulatory Authority of India (TRAI), Insurance Regulatory and Development Authority (IRDA), Ways and Means Advances, demutualization of stock exchange, dematerialized trading and rolling settlement with t+1 payment mechanism and lastly

legal reforms like Fiscal Responsibility Act, Insolvency act, Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFESI) Act, Competition Act, National Rural Employment Act etc. These were called the Second Generation Reforms. These reforms were supportive, complementary and consensus driven as they required political consensus whereas the earlier reforms were crisis driven.

Measures for trade liberalization went through fairly smoothly. Import and export trade are now more or less free, tariff rates have been lowered and rationalized substantially, exchange rates are left to be determined by the market subject to strategic intervention by the Reserve Bank, and a limited degree of convertibility on capital account is now permitted. The dismantling of the control system widely welcomed by large scale private sector industries was also completed in a relatively short time. The financial sector and markets have also been opened up and permitted to operate more freely. But fiscal consideration and privatization have floundered in the face of severe oppositions.

The role of planning process in the context of restructuring and liberalization of the Indian economy was redefined. So far, resource allocation had been the predominant role of the Planning Commission. This changed and instead of looking for more increases in plan outlays, emphasis shifted to increase in efficiency of utilization of allocations being made and the prospects of return on the investments. The Planning Commission played mediatory and facilitating role among states

to manage the changes smoothly and create a culture of high productivity, cost efficiency and sound financial discipline in the government. The process of planning was reoriented to make planning largely indicative. Planning proceeded with a vision of the society to be created and through an appropriate mix of policy instruments with the influence of decisions of the various economic agencies to achieve the desired goals.

1 (III) REVIEW OF LITERATURE:

Sen (1995)¹ brings out the interdependence between markets and government. When he talks about market excluding and complementary interventions he makes himself very clear as to what is the role of the state and what is the role of the market. As markets do certain things and abstain from others and a failure can arise from either positively doing something that would have harmful consequences or from not doing something that would have to be done for good results..... The market like other institutions, does certain things, and abstains from others. There is a real asymmetry here which is hidden by unclear contrasts between the market mechanism and non market systems. An economic arrangement can be non market in the sense that markets are not allowed to operate freely or even to operate at all. This can be called market excluding arrangement or it can be non market in the sense that many things are done, say, by the state, that the market would not do. Such supplementary operations do not have to

prohibit markets and exchanges. This is called a market complementary arrangement'. He brings out the positive and negative effects of reforms when he says 'market allocation can certainly have some un-equalizing influences, but so do bureaucratic controls, public sector inefficiency and trade restrictions. The benefits of trade liberalization is that it 'tilts economic activity towards the production of exportable commodities, which tend to be labour intensive and this can be expected to have often enough , an inequality reducing influence' and the negative effect could be the 'fact that privileged social groups are often in a position to take advantage of new economic opportunities.' He seems very sensible when he says that 'if the reforms in question take the form of simply removing controls, and leaving things to the market, it is difficult to predict in which direction the distributional effect will go. On the other hand, if the economic policy involves a strong emphasis on promoting labour intensive economic activity on enabling disadvantaged groups to participate in the process of economic growth on making use of growing resources to expand public services and developing social security arrangements the reform process may provide a real opportunity to achieve greater equity as well as to reduce poverty'.

Mishra and Prusty (2001)² argues that despite the introduction of a large number of deregulatory measures in the new industrial policy of 1991, the growth performance of the Indian industry in the new regime is far from satisfactory and the reforms package in general and new

industrial policy in particular have largely failed in bringing back even the level of growth seen in many of the constituent sectors in the eighties and are of the view that the current liberalization process of the industry sector needs a fresh look. The liberal measures in the industrial policy should be supported by reforms of the policies relating to infrastructure, international trade, etc. for their effective functioning. Besides, the policy initiatives, apart from removing the imperfections existing in the system, also need to encourage development of indigenous technology through in house R&D, building up manufacturing and marketing related complementary assets and making adequate exposure to the international market through exports. Finally, the restructuring and growth strategies of the firms through merger and acquisitions (M&As) have serious implications for industrial policy in general and competition policy in particular. Although the fast changing global environment has made it necessary for firms to enhance their competitiveness and grow through M&As, it should be ensured that the M&As do not pose any threat to competition.

Gupta (2001)³ is of the view that development is a long and complex evolutionary process of social change rather than merely generation and accumulation of economic resources and that development thinking has evolved into a broad spectrum realization that it must move beyond economic growth to include important social goals like reduced poverty, eradicating unemployment, enhanced opportunities

for better education and health and improved quality of life and for a sustainable progress towards these goals requires integrated implementation which must be open , participatory and inclusive.

Mishra and Dhaka (2001)⁴ say that sustained development requires institutions of good governance that embody transparent and participatory processes and that encompass partnerships and other arrangements among the government and other element of civil society and that a strong network of effective organizations and enabling institutions is central to holistic development. When a government provides goods directly, it is often a monopoly supplier, as such it must not take advantage of its monopoly position to provide a sub optimal level of service to the public, and rather it must structure itself in a way that provides incentives for efficient production and for ongoing gains in productivity. These governance institutions are of primary importance in determining how society addresses human development.

Datt and Sundharam (2001)⁵ call for a reform of the reform process itself as 'the reform process initiated in 1991 has been emphasizing the use of the market forces, which naturally attract investment to regions more developed in infrastructure-both economic and financial. It does not pay any attention to the question of regional imbalance.'

Stiglitz (2002)⁶ admits that globalization is not working particularly for many of the world's poor. Of particular interest is his analysis of

priorities and strategies of the pro-reformers which he proves to be faulty. For example, stabilization is on the agenda but job creation is off the priority, taxation along with its adverse effects is on the agenda while land reforms is off, there is money to bail out banks but not to pay for improved education and health services let alone to bail out workers who are thrown out of their jobs as a result of IMF's advocated macro economic stabilization. He argues that the West acting through the IMF and WTO has seriously mismanaged the process of privatization, liberalization and stabilization and by following its advice many of the Third World countries have become actually worse off. But he does not simply take a pro or anti-globalization stance. Instead he confronts us with the difficult realities of the economic world. He states just what he believes the market can be trusted to do and which responsibilities the government must not hand over to it. He also offers real solutions to it. He doesn't say that these reforms are entirely bad, but the important thing is that there are some pre-conditions that must be fulfilled before these reforms take place.

Mitra (2002)⁷ argues that rural India is suffering from acute unemployment and the only viable alternative for employment generation seems to be engaging them in allied agricultural activities by the local Common Pool Resource Management. The way is cooperative formation, which will be controlled by Panchayati Raj Institutions (PRIs).

Mahendradev and Moorj (2002)⁸ focusing on social sector expenditure in the 1990s, feels that India's performance in the social sector is far from satisfactory as there are also huge regional disparities within India. Some states or regions within states do much better than others.

Sundaram and Tendulkar (2003)⁹ examine the levels and changes in poverty indicators of the rural and urban population in India disaggregated by social and economic groups. Their analysis is based on the comparable estimates of poverty for the mixed reference period computed from the unit record data for the 50th (1993-94) and the 55th (1999-2000) rounds of the Consumer Expenditure Surveys conducted by the National Sample Survey Organization (NSSO). The issue is how far different social and economic groups shared the overall decline in poverty in the 1990s. The social groups most vulnerable to poverty have been identified to be scheduled caste and scheduled tribe households with both these groups having above average levels of poverty indicators in the rural and the urban population. Among the economic groups, the most vulnerable groups are the agricultural labor households (rural) and the casual labor households (urban) each having the highest levels of poverty indicators in their respective population segments. In terms of changes in poverty in the 1990s, it is found that while scheduled caste, agricultural labour (rural) and casual labour (urban) households experienced declines in poverty on par with the total population,

scheduled tribe households fared badly in both the segments. They examine the levels and changes in poverty indicators in the 1990s for rural and urban populations disaggregated by social groups and household types distinguished according to major source of livelihood during the 365 days preceding the date of interview.

Jha and Sharma (2003)¹⁰ argued that the spatial distribution of poverty in India has emerged as a matter of urgent concern in recent times. They conclude that the economic reforms programme has been unable to make any significant dent on the spatial distribution of expenditure poverty.

Maura (2004)¹¹ argues for a better way to create inclusive development and growth emphasizing that unless India's growth percolates to its poor and underprivileged India will have a divided and unequal society and nation. He highlights some key steps that are needed to put India on the appropriate growth trajectory. These include dialogue and according to him India needs to create a consensus for inclusive growth. He stresses on how businesses must look beyond profits and emphasizes the critical need for collaboration between businessmen and government for nation building and presents a conceptual roadmap for India's future suited for its diverse economic, social and cultural needs.

Bhalla and Lapeyre (2004)¹² investigate the notion of social exclusion as a new way to approach issues as the 'new' poverty, long

term unemployment, precariousness and social polarization and distinct disintegration. Exploring the specific forms of social exclusion in the ongoing processes of globalization, deregulation, and the crisis of the welfare state he points out at the failures of the Washington Consensus and talks of a new alternate development paradigm and underlines the importance of participation and ownership for a successful economic transformation.

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Misra and Puri (2004)¹³ are of the view that there are some “inherent flaws in the stabilization and structural reform measure undertaken so far” and pointed out five shortcomings: absence of a broader development strategy, wrong sequencing of reforms, hasty pace of reforms, prerequisites of reforms ignored and absence of human development goals as an integral part of the strategy.

Joshi (2004)¹⁴ shows that there has been a growing 'tertiarisation' of the structures of production and employment in India emphasizing the 'catalytic' role that can be played by the tertiary sector, at least in the medium term, in employment generation and poverty alleviation. However, in the long run the simultaneous growth of the three sectors is desirable. The analysis of the sectoral composition of GDP and employment for the period 1950-2000 brings out the fact that during the process of economic development in India, a growing 'tertiarisation' of the structure of production and employment has been taking place. The tertiary sector emerged as the major sector of the economy both in terms

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of growth rates and share in GDP in the 1990s. It is to be noted here that while the agriculture and manufacturing sectors have experienced phases of deceleration, stagnation and growth, the tertiary sector has shown a uniform growth trend during the period 1950-51 to 1999-2000. In fact, the recent years' experience shows that the growth of services sector has imparted resilience to the economy, particularly in times of adverse agricultural shocks as also driving cyclical downturns in industry. The sectoral distribution of the workforce in India during the period 1983 to 2000 reveals that structural changes in terms of employment have been slow in India as the primary sector continued to absorb 60.4 per cent of the total workforce even in 1999-2000, followed by the tertiary and industrial sectors (22.7 per cent and 16.8 per cent) respectively. There has been disproportionate growth in the tertiary sector, as its share in employment has been far lower as compared to its contribution to GDP. Not only this, the primary and tertiary sector witnessed deceleration in growth rates of employment during the post-liberalization period (1994-2000). In case of the latter, it was mainly due to the sharp deceleration in employment growth in community, social and personal services to 0.55 per cent in the post-liberalization period as against 2.90 per cent in the pre-liberalization decade.

Parikh and Radhakrishna (2004)¹⁵ say that economic reforms have caused structural changes in the Indian economy as redeployment of resources often causes transitional problems as there are gainers and

losers in resource allocation. On poverty reduction they say that while poverty has been reduced in all major states during the nineties, the process has been very uneven and the poor got concentrated in less developed states and among a few vulnerable social groups. The occupational composition of the poor is also changing as rural poverty is getting concentrated mostly in the agricultural labour and artisan households and urban poverty in the casual labour households. Also, ^{22a} there was a difference in the rate of reduction in poverty between urban areas and rural areas with the former declining faster. They also take poverty to be a social phenomenon as poverty is disproportionately high among scheduled castes and scheduled tribes. They give three reasons for poverty growth not being impressive during the nineties. First, poor performance of agriculture; second, slowdown in expansion of rural employment and third, skewed spatial pattern of growth with less growth in areas where poor are mostly located.

Radhakrishna, Rao, Ravi and Reddy (2004)¹⁶ focus on two interrelated but distinct issues of chronic poverty and malnutrition. They feel that the incidence of chronic poverty is higher than that of very poor ^{22b} in both rural and urban areas but the former is lower than severe malnutrition. They are of the view that although the risk of malnutrition decreases with household income, elimination of poverty cannot ensure eradication of malnutrition. The incidence of child malnutrition is particularly high among poor households where mothers have poor

nutritional levels, less education and poor access to antenatal care. The lowest incidence of child malnutrition is not in the richest but in the middle income states with progressive social policy. In the 1990s, with faster urban economic growth, urban poverty declined faster, but inter-quintile urban inequality and rural-urban inequality worsened. Poverty, chronic poverty and malnutrition, together, got concentrated in a few geographical locations and among specific social groups.

Devarajan and Shah (2004)¹⁷ build an analytical and practical framework for using resources more effectively by making services work for poor people. It focuses on services that have the most direct link with human development- education, health, water, sanitation and electricity - and uses examples of service delivery from India, elsewhere in South Asia and the world to illustrate the framework.

Dwivedi (2005)¹⁸ argues that in the wake of economic reforms, while the economy has performed well in terms of growth rate of GDP, its performance in the form of human indicators has been unsatisfactory. Social sectors like health, family welfare, education, training, employment, women empowerment and rural infrastructure have lagged behind in the race for better standard of living.

Luthra (2005)¹⁹ feels that though India has been on track to reduce income poverty, but the achievement in respect of human development concerns like that of health, education, availability of drinking water etc. has not been up to mark. The efforts to achieve a

higher GDP growth during the foreseeable future will not be adequate to achieve the millennium goal of reducing by half the number of people in absolute poverty by the year 2015. The economic reforms and the new initiative taken have mainly benefited the sectors like industry, IT, services and external sector, but the government has not paid adequate attention towards sectors like agriculture, social sector and rural development. He warns that the data on GDP growth, production, foreign exchange reserves, poverty etc. should not comfort us as the situation on the ground is not happy as poverty is still rampant, quite visible in villages, town and cities, and not only that, reforms have also in fact increased inequality and the rich have become richer and the poor have become poorer leading to resentment and social jealousy which is boiling over into violence.

Sury, Mathur, Bhasin (2006)²⁰ are about the view that to ensure the benefits of development planning flow to all parts of the country, regional balanced development has all along been accepted as an important national objective. However, the pattern of economic reforms over the years has not promoted this cherished objective. It has left in its trail a variety of inequalities which have caused socio-political tensions. Some states, that is, Karnataka, Andhra Pradesh, Maharashtra have surged ahead while others are lagging behind. While the economy has performed well, since mid-1980s, in terms of growth rate of GDP, its performance in terms of human development indicators has been

satisfactory. Economic reforms of the last 15 years have not paid adequate attention to the social sector (health, education etc.). There is a feeling in some quarters that the industrial growth of India is becoming elite-oriented by registering relatively large increase in the production of electronics items, beverages, cosmetics, motor cars, refrigerators, and finer variety of textiles. It needs to be emphasized that 70 per cent of India's population (70crore) still lives in rural areas and 26 per cent of the population (26crore) is still officially below the poverty line.

Tripathy (2006)²¹ feels that the rural population in India which forms about two-third of the total population is still dependent on agriculture and there is a crying need for timely and adequate availability of funds for agricultural and rural finance is a must for improving the condition of the poor. According to him micro-credit and micro-finance is one of the most effective strategies to alleviate poverty as it can effectively generate employment and sustain the income of the households by giving them opportunities of work.

Sankaran (2006)²² advocates that it is truism that India lives in the villages. In this regard he is particularly concerned with the employment options of those who, do not migrate to urban areas and continue to live in the rural settlements. He argues that to provide employment to all the migrants in the cities is not an exact solution rather the emphasis should be to provide employment at the place of residence itself by organizing unskilled workers into people centered participatory

institutions like Labor Contract Cooperative Societies affiliated to the state level cooperative structure.

Swaminathan (2006)²³ feels that overall economic growth rates have little meaning if we do not look after the economic health and survival of over 60 per cent of our population. He talks of various concerned areas like soil health enhancement, irrigation water, supply augmentation and demand management, credit and insurance and on markets.

Alagh (2006)²⁴ laments on the neglect of agriculture and says that during the nineties, agricultural growth fell, structural change in the economy in terms of rural-urban shares slowed down and inequality between rural and urban areas went up and without a dynamic agriculture, inclusive growth becomes a mirage. Agricultural growth of a sustained and widespread kind is a precondition of rural development, which is possible in a market and increasingly open economies only if the reform process makes crop production profitable.

Babu (2006)²⁵ describes India's economic reforms process as a top down approach- moving from broad economic reforms in macro sector towards the individual sectors, which is in sharp contrast to the economic reforms in transition economies such as China where the now famous household responsibility systems began with agricultural sector. He adds that investment towards rural transformation could result in a considerable pay off in terms of economic growth, equity and sustainable

management of natural resources. According to him the totality of challenges facing Indian agriculture could be broadly defined under the broad spectrum of productivity losses, environmental degradation, and lack of crop diversification, domestic market and trade reforms.

Kamalakannan (2006)²⁶ is of the view that rural industrialization is important not only as a means of generating employment opportunities in the rural areas with low capital cost and raising the real incomes of the people, but also because it contributes to the development of agriculture and urban industries. Without rural industrialization it would not be easy to solve the problem of unemployment in rural areas. This employment is the surest way to enable the vast numbers living below the poverty level to rise over it. Rural industries are capable of offering employment opportunities at the place of residence to a large section of population. These industries have the capacity to correct regional imbalances by initiating industrial activities on dispersed basis in the most neglected, backward inaccessible areas where perhaps large scale sector is unable to penetrate. Rural industrialization is a key to rural development.

Mukhopadhyay (2006)²⁷ argues in favor of Right to Information Act and its importance in eradication of poverty and unemployment and good governance as accountability means far more than accounts and audit. In the context of anti poverty programmes, problems posed could be overcome if government audit for local bodies is properly mandated and

plays a supportive role with reference to social audit by taking note of the documentation of local bodies.

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Singh (2006)²⁸ is of the opinion that the Right to Information Act can start a process of governance that gradually could shift the Indian democracy to a vigorously participatory one.

1 (IV) OBJECTIVE OF THE STUDY:

The basic objective of this study entitled “Pattern of Growth and its Impact on Poverty and Employment in the Indian Economy since 1991” is to analyze the pattern of growth that has taken place in the Indian economy since 1991 and its impact on poverty and employment. The important change that took place was the economic reforms of 1991 which resulted in a shift from state dominated economic structure to a privatized, liberalized and globalized economy. Among all other things the main motive of the economic reforms of 1991 and the subsequent reforms was economic growth. These reforms were introduced in India with great optimism and enthusiasm based on the argument that the regime of controls and licenses has put heavy chains on the development process and the remedy suggested was that unless these controls and licenses regime is dismantled, the economy would not be able to expand as investment had stifled, the regime had resulted in the growth of corruption and had formed an evil nexus between the politicians and the bureaucrats, which was an obstacle to growth. Hence, it was hoped that once the economy is freed from the regime of controls, licenses and

quotas it will result in a much higher growth. As far as this reasoning is concerned that growth is a necessary condition for not only economic but also for social progress, the rationale for these reforms becomes logical but a question arises as to whether economic growth can also be taken to be the sufficient condition for progress and development. If this economic growth is inclusive of all, via the trickle down mechanism there seems to be no problem with the over-involvement with growth only, as the percolating of benefits of growth to the lowest segment, implying that it is only growth which is important. According to this view economic growth is the panacea for all the social ills. That is, a higher growth will rather automatically lead to, among all other things, to a decline in poverty and an increase in employment. In this study a relationship is sought to be established between GDP growth and reduction in poverty and unemployment. This study concentrates on the growth of GDP and the reduction of poverty and unemployment.

1 (V) RESEARCH HYPOTHESIS:

There is a very strong debate, famous not only in economic circles but also in common man's view, that these reforms and the changes in the economic structure of the country have rather neglected the social aspects. In view of the above changes in the Indian economy, particularly the economic reforms of 1991 and the presumed negative relationship between growth and the evils of poverty and employment, this study concentrates on three hypotheses:

- GDP growth rate has shown a valid change since 1991.
- The number of poors has declined after 1991.
- The number of employed have increased since 1991.

1 (VI) SOURCES OF DATA AND METHODOLOGY USED:

The study is extensively based on the secondary data. The relevant data have been collected from the various issues of Economic Survey and NSSO data. The data on national income pertains to the estimates of Central Statistical Organization as published in respective year's Economic Survey. Some data particularly on sectoral growth rates have been taken from National Income Statistics of CMIE. Some data have also been taken from Planning Commission documents, Directorate of Economics and Statistics and the Economic Times. The statistics related to the international arena is collected particularly from various issues of World Development Reports and Human Development Reports.

As far as the methodology is concerned, statistical techniques of correlation and regression have been used. Correlation analysis deals with the association between two or more variables. If two or more quantities tend to vary in sympathy so that movements in one tend to be accompanied by corresponding movement in the other, then they are said to be correlated. The value of the coefficient of correlation lies between +1 and -1. If both the variables are varying in the same direction, that is, if one variable is increasing then, on an average, the other is also increasing or, if one variable is decreasing the other, on an

average, is also decreasing, correlation is said to be positive. On the other hand, if the variables are varying in the opposite direction, that is, as one variable is increasing, the other is decreasing or vice versa, correlation is said to be negative. In this study particularly two different methods are used for finding correlation. The first one is Karl Pearson correlation Spearman's Rank Correlation, with the formula:

$$r = \frac{\sum xy}{\sum x^2 \sum y^2}$$

Where, r = Karl Pearson correlation coefficient

$$x = x - \text{mean of } x \text{ and } y = y - \text{mean of } y$$

In this study two correlation analyses has been done: one between the poverty ratios and GDP growth and the other between unemployment rates and GDP growth.

The other method is Spearman's Rank correlation coefficient, with the formula

$$R = 1 - \frac{6\sum D^2}{N(N^2 - 1)}$$

Where, R = Spearman's Rank Correlation Coefficient

D = Difference between the two Ranks

N = Total number of items. In this study rank correlation has been done between the increase in income of various states and a respective decrease in the state's poverty ratios.

The technique of regression analysis is used to determine the statistical relationship between two or more variables and to make prediction of one variable on the basis of others. It helps in obtaining a measure of the degree of association that exists between two or more variables. Here, there are two type of variables, dependent and independent variable. The regression equation to be used is

$$Y = a + b X_1 + c X_2 + d X_3 + U.$$

Where, Y = dependent or explained variable

X_1 = first dependent or explanatory variable

X_2 = second dependent or explanatory variable

X_3 = third dependent or explanatory variable

a = intercept term

b = coefficient of first dependent or explanatory variable

c = coefficient of second dependent or explanatory variable

d = coefficient of third dependent or explanatory variable.

Here the dependent variable Y is expressed in terms of three independent variables. The greater the value of a particular regression coefficient, higher is the attribution of the changes in the dependent variable to that particular variable. In this study a multiple regression has been done with primary, secondary and tertiary sector as the independent variable and GDP growth rate as the dependent variable.

The estimates of correlation and regression are then tested for their significance using hypothesis testing. Hypothesis testing enables a

researcher to decide whether sample data will provide support to a particular hypothesis based on which it can be generalized to the overall population. First a null hypothesis is formulated which asserts that there is no significant difference between the statistic and the population parameter and whatever observed difference is there, it is merely due to chance and the hypothesis that contradicts the null hypothesis is the alternate hypothesis. In order to measure the significance of the analysis P value has been used. The P value is the probability that the hypothesis being tested is true. If P value is 0.05 it indicates that the hypothesis has a 5 percent chance of being true. Generally P value of 0.05 is taken as the critical level for the rejection of the hypothesis. This level of significance is a measure of the degree of risk that a researcher makes while interpreting results. As it is the null hypothesis that is generally being tested we are always looking for low P values to reject this hypothesis. The smaller the P value the more confident we can be in the conclusions drawn from it. As an example, a P value of 0.0001 indicates that the chance of the hypothesis being tested being true is one in ten thousand.

The coefficient of multiple regression measures the magnitude of the association of the variable involved in the multiple regression. It is denoted by R^2 . In mathematical terms it measures the percentage of variation in variable Y explained by the independent variables. For example, if the R^2 value is 0.70, then this implies that 70 percent of the

total variations in Y variable are explained by variation in the independent variables. In this study F-test has been used to test the significance of R^2 value.

1 (VII) SCHEME OF THE STUDY:

This study is basically divided into six chapters. Chapter first is an introductory chapter. In the introduction, first of all the economic changes that have occurred in India since 1991 are discussed followed by a review of literature related to the current topic. This is followed by the objective of the study, the research hypothesis and finally sources of data and the methodology used.

The second chapter deals with the properties of growth and development. Emphasis is laid on analyzing the difference between the two followed by the study of the indicators of growth and development, with particular emphasis on human development index (HDI). The classification of the world economies on the basis of income and the determinants of economic development have also been discussed in this chapter.

The third chapter deals with the pattern of growth of the Indian economy. It includes various indicators of economic growth followed by an analysis of the transition of the economy from a primary sector dominated to a tertiary sector oriented economy. Then a comparison between the growth rates in the decade of eighties and nineties is made in order to bring out the impact of reforms. It also deals with the study of

the sector-wise performance of the Indian economy during the nineties followed by a study of the inter-state variations in terms of growth. Finally the level of inequality prevalent in the economy has been discussed.

The fourth chapter deals with the incidence of poverty. After a discussion on the concepts of poverty, the poverty monitoring system of India is discussed followed by the estimates of poverty during respective NSSO Surveys. In order to look for the impact of the reform process on poverty the 55th round and 61st round of NSSO is particularly emphasized as it pertains to the time period after reforms and finally the correlation between economic growth and poverty reduction is seen.

The fifth chapter examines the unemployment situation prevalent in the country. It deals with the study of the workforce participation rates followed by an analysis of sector-wise distribution and status of employment and various alternative measures of unemployment used in India. This is followed by a detailed study of the employment-unemployment situation during and after nineties involving sector-wise, industry-wise and state-wise analysis.

Finally in the sixth chapter the role of government and the future of the reforms are discussed followed by the remedial measures to promote economic development. This is followed by the bibliography.

This study is strictly limited to the secondary data available as it was beyond the scope of the study to go for primary data collection. And

it also concentrates mainly on the government and official data. Another limitation is that this piece of work could not study the aspects of India's development in terms of entitlements, capabilities and freedom as discussed by Amartya Sen and others. As this study particularly concentrates on the growth pattern of the Indian economy and the trends in poverty and unemployment there is further scope for future research in analyzing social sector expenditure, and poverty and unemployment alleviation programmes. Although in this study inter-state analysis has been done, there is also further scope for future research in studying inequalities.

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CHAPTER-II

THE DYNAMICS OF ECONOMIC DEVELOPMENT

THE DYNAMICS OF ECONOMIC DEVELOPMENT

Economic development refers to growth accompanied by qualitative changes in the structure of production and employment generally referred to as structural change. Aspects which are of particular importance for developing ³⁹⁹ economies are increases in the share of dynamic industrial sector in national output and employment and a decrease of the share of agriculture. This implies that economic growth which is simply the increase in national income could take place without any economic development. As distinct from growth which is one-dimensional in nature, measured with reference to increase in national income only, development is multidimensional in its approach. It is evaluated with reference to many a qualitative factors like improvement in literacy, improvement in health, a sustainable growth which keeps environment in its consideration, proper law and order situation and of course high standards of living. This can be further substantiated from the experience of Sri Lanka or the state of Kerela, where growth was not very rapid but where welfare ³⁹⁶ facilities improving, as compared to countries like Brazil where extremely rapid growth had hardly affected poverty level. Another example is provided by those oil exporting countries, which experience sharp increases in national income but saw hardly any changes in their economic structure.

2 (I) GROWTH VERSUS DEVELOPMENT:

The interest in the relation between growth and development can be dated back to Adam Smith when he said "No society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable."¹ Later it was realized that a major part of the developing world's population had not benefited at all from the rise in national incomes and structural changes. Now the concept of economic development was redefined in terms of reduction of poverty, unemployment and inequality within the context of a growing economy. Now there were talks of redistribution with growth. Talking in this frame work Charles P. Kindleberger and Bruce Herrik asserted that "Economic development is generally defined to include improvements in material welfare, especially for persons with the lowest incomes, the eradication of mass poverty with its correlates of illiteracy, disease and early death; changes in the composition of inputs and output that generally include shifts in the underlying structure of production away from agricultural towards industrial activities, the organization of the economy in such a way that productive employment is general among the working age population rather than the situation of a privileged minority; and the correspondingly greater participation of broadly based groups in making decisions about the directions, economic and otherwise, in which they should move to improve their welfare."² In the 1960s the view that developments involves more than economic growth gained prominence. Dudley Seers formulated three additional requirements

for the use of the term development, namely that there should be a decrease in poverty and malnutrition, that income inequality should decline, and that employment situation should improve. He raised some basic questions which conceptualized economic development. He asserted, "The questions to ask about a country's development are therefore what have been happening to poverty? What has been happening to unemployment? What has been happening to inequality? If all three of these have declined from high levels, then beyond doubt this has been a period of development for the country concerned. If one or two of these central problems have been growing worse, especially if all three have, it would be strange to call the result 'development' even if per capita income doubled."³ This line of argument is based on the practical experience of a number of Third World countries where growth efforts have bypassed the poorest in the developing countries even when their economic growth targets were realized. If we go by the traditional approach of development as a sustained annual increase in the gross national income along with changes in the structure of production and employment such that the share of agriculture declines in both, whereas those of manufacturing and tertiary sector increases then these countries could be classified as developing, whereas by the more recent poverty, inequality and unemployment criteria they are still backward. This led to the 'Dethronement of GDP' as Todaro⁴ calls it. Now economic development was redefined in terms of reduction or elimination of poverty, inequality and unemployment within the context of a growing

economy. Now the emphasis shifted to redistribution from growth. This new concept of development is definitely superior to the traditional view of development but it perceived development only as an economic phenomenon concerned with just the quantitative measurement of income, inequality and unemployment. Goulet opened a new dimension when he wrote, "Underdevelopment is shocking: The squalor, disease, unnecessary death and hopelessness of it all! No man understands if underdevelopment remains for him a mere statistic reflecting low income, poor housing, premature mortality or underemployment. The most emphatic observer can speak objectively about underdevelopment only after undergoing, personally or vicariously the 'Shock of underdevelopment'. This unique culture shock comes to one as he is initiated to the emotions which prevail in the culture of poverty. The reverse shock is felt by those living in destitutions when a new self understanding reveals to them that their life is neither human nor inevitable..... The prevalent emotion of underdevelopment in a sense of personal and societal impotence in the face of disease and death, of confusion and ignorance as one gropes to understand change of servility towards men whose decision governs the course of events of hopelessness before hunger and natural catastrophe. Chronic poverty is a cruel kind of hell and one cannot understand how cruel that hell is merely by grazing upon poverty as an object".⁵ Now economic development began to be increasingly associated with the removal of poverty, unemployment and inequality. This view was further elaborated by

Herrick and Kindleberger when they asserted, "Economic Development is generally defined to include improvement in material welfare, especially for persons with the lowest incomes, the eradication of mass poverty with its correlates of illiteracy, disease and early death; changes in the composition of inputs and outputs that generally includes shifts in the underlying structure of production away from agricultural towards industrial activities; the organization of the economy in such a way that productive employment is general among the working age population rather than the situation of a privileged minority and the correspondingly greater participation of broadly based groups in making decisions about the directions, economic and otherwise, in which they should move to improve their welfare".⁶ Such was the intensity of the relation between economic development and poverty that Herrick and Kindleberger start the 1984 edition of their book 'Economic Development' with the words "Economic development studies the causes and cures of mass poverty."⁷ The change in approach can be summarized in the words of Edgar Queen as "Development has been treated by economists as if it were nothing more than an exercise in applied economics, unrelated to political ideas, forms of government and the role of people in society. It is high time we combine political and economic theory to consider not just ways in which societies can become more productive but the quality of the societies which are supposed to become more productive – the development of people rather than development of things."⁸

Now the line between economic development and non-economic development gradually disappeared. Underdevelopment began to be seen as a state of mind as much as a state of national destitution. Following this approach Todaro asserts "Development must therefore be conceived of as a multidimensional process involving major changes in social structures, popular attitudes and national institutions, as well as the acceleration of economic growth, the reductions of inequality and the eradication of poverty. Development, in its sense, must represent the whole gamut of change by which an entire social system, turned to the diverse basic needs and desires of individuals as social group within that system, moves away from a condition of life widely perceived as unsatisfactory towards a situation or consideration of life regarded as materially and spiritually better."⁹

With this apparent shift towards the distributional consequences of economic policy the concept of development had to be broadened to include major economic and social objectives and in the words of Thirwall¹⁰ "values that societies strive for". In this direction Goulet's¹¹ three components of development comes handy. These core values – life sustenance, self esteem and freedom – represent common goals sought by all individuals and societies. Life sustenance is concerned with the provision of basic needs. These life sustaining basic needs include foods, shelter health, protection etc. "No country can be regarded as fully developed if it cannot provide all its people with such basic needs as housing clothing food and minimal education."¹² Unless a sustainable and continuous economic progress

both at the individual level and societal level happens it won't be possible to realize the full human potential. The next, that is, self esteem is concerned with the feeling of self respect and independence. It is a sense of worth, all people and societies seek some basic form of self esteem. "No country can be regarded as fully developed if it is exploited by others and does not have the power and influence to conduct relations on equal terms."¹³ Besides striving for material well being developing countries seek development for self esteem in order to eradicate the feeling of dependence and dominance associated with underdevelopment. The third value refers to freedom from the "three evils of 'want, ignorance and squalor' so that people are more able to determine their own destiny".¹⁴ Freedom here means an expansion in the numbers of available choices both for individuals and for societies. A person cannot be free unless he doesn't have choices, which material well being provides and also freedom to choose which development provides. The relation between economic growth and servitude is made clear when Lewis says "the advantage of economic growth is not that wealth increases happiness, but that it increases the range of human choice."¹⁵

This multifaceted approach to development was further elaborated by Nobel Laureate Amartya Sen when he argued that "Development requires the removal of major services of unfreedom; poverty as well as tyranny, poor economic opportunities, neglect of public facilities as well as intolerance or over activity of repressed states. Despite unprecedented increase in overall opulence, the

contemporary world denies elementary freedom to vast numbers – perhaps even the majority of people. Sometimes the lack of substantive freedom relates directly to economic poverty, which robs people of the freedom to satisfy hunger or to achieve sufficient nutrition”.¹⁶ These remarks clearly indicate the limitation of economic growth. He doesn’t consider people just the means of production. Therefore, for him the conventional criterion of economic success, i.e. a high growth rate is not the ultimate objective. In his opinion economic growth is to be valued only as a means to a deeper end. Hence between growth and development his choice is clear. In most cases economic growth is a necessary but not a sufficient condition of development. Therefore, the goal of any society should be development rather than economic growth. Sen¹⁷ defines development in terms of the expansion of entitlements and capabilities. He defines entitlement as the set of alternative commodity bundles that a person can command in a society, using the totality of rights and obligation that he or she faces and entitlements generate the capability to do certain things. In this respect Goulet’s core components of development are the same as Sen’s entitlements and capabilities as entitlements give life sustenance and self esteem and capabilities ensures freedom. These entitlements and capabilities are not accounted for by the traditional aggregate measure of growth of output. This argument has been further substantiated by Thirwall when he said, “For most people, entitlements depend on their ability to sell their labour and on the price of commodities. It is not only the market mechanism that

determines entitlements, however, but also such factors as power relations in society, the spatial distribution in society of resources, such as schools and health care and what individuals can extract from the state".¹⁸ In Sen's¹⁹ view development is an integrated process of expansion of entitlement and capabilities and substantive freedoms. Economic growth, technological advance and political change are all to be judged in the light of their contributions to the expansion of human freedoms. Among the most important of these freedoms are freedom from famine and malnutrition, freedom from poverty, access to health care and freedom from premature mortality. In a telling empirical example, Sen²⁰ shows that urban African American have lower life expectancies than the average Chinese person or inhabitants of the Indian state of Kerala, in spite of much higher average per capita income in the USA and this is why development has to be seen in a different perspective away from mere growth as income is not an appropriate measure of entitlement and freedom. This is what Sen²¹ argues when he refers to famines as lack of entitlement and not lack of food as famines have played havoc despite of the presence of sufficient food grains. According to Sen²², freedoms are both ends and means. Thus markets can be an engine for economic growth, but what is sometimes forgotten is that they constitute important freedoms in themselves, namely freedoms to exchange or transact. One important area where freedoms have frequently been restricted is the labour market, where institutional arrangements can restrict the free movement of labour. Political freedoms can contribute to economic

dynamism, but are goals in themselves. Sen²³ argues somewhat optimistically that all freedoms are strongly interconnected and reinforce each other. He also tends to underemphasize clashes between freedoms of different group of people and the value choice that still need to be made. There is no objective definition of development and there may be basic indifferences of opinion about the goals of development, even including that of the very goal of freedom, which may not be the ultimate goal from a variety of religious perspectives. Nevertheless, his use of the concept of freedom as a normative yardstick for development is insightful. In his perspective, economic growth remains important but not as a goal in itself. It is important in its potential contribution to a wide range of freedom. It is not enough in itself. Sometimes changes in other spheres such as education and health can be at least as important in the expansion of freedom. Sen is very clear when he asserts, "We must not make the mistake – common in some circles – of taking the growth rate of GNP to be the ultimate test of success and of treating the removal of illiteracy, ill-health and social deprivations – as at least – possible means to that hallowed end." ²⁴

So it can be said that development is a normative concept and involves very basic choices and values. It is a movement in the direction of attaining the goals of ^{ugb} increased economic welfare, reduction in poverty and unemployment along with reduction in inequality and improved health and education and it can be said that development has occurred when there has been an improvement in

basic needs and when economic progress has led to a greater sense of self esteem for one and all and when material advancement has finally enhanced people's entitlement and capabilities along with increased political and social freedom. For summarizing it can be quoted from WDR 2006 "Human development is about freedom. It is about building human capabilities – the range of things that people can do, and what they can be. Individual freedom and rights matter a great deal, but people are restricted in what they can do with that freedom if they are poor, ill, illiterate, discriminated against, threatened by violent conflict or denied a political voice."²⁵

2 (II) INDICATORS OF GROWTH AND DEVELOPMENT:

Given the centrality of economic growth, the summary indicator most often used to indicate the degree of 'development' of a country is national income. National income can be calculated in three different ways either by aggregating the money payments made to the different factors of production (Income method) or by aggregating of all value added in an economy in a given year (Output Method) or by aggregating all expenditures in a country, that is, consumer plus investment, plus government expenditures plus the value of minus expenditures on imports in a given year (Expenditure Method).

An important conceptual distinction is that of between gross national product (GNP) and gross domestic product (GDP). The difference between GNP and GDP lies in the net balance of foreign income accruing to national of country, deriving from factors of production abroad and payments to other countries for factors of

production within the country, owned by nationals of other countries. This distinction is very important for developing countries. Since a significant part of investment in developing countries is foreign investment, there is a net annual outflow of dividends and profits. Therefore, gross national product will be less than gross domestic product.

There are two kinds of debates on growth indicators such as per capita GNP or per capita GDP. First, there are all sorts of technical objections to the use of per capita GNP as an adequate indicator of the level of economic development of a country. Secondly, there are substantive objections to the use of per capita GNP as an indicator of development. After all, as mentioned earlier development involves much more than economic growth alone.

The technical objections to the use of per capita GNP as an indicator of economic development are: Principally GNP refers to that part of the national income that is traded via the market for money. In developing countries, however, there is widespread subsistence production. If there is a shift from subsistence production to production for the market in process of economic development, it seems as if national income is increasing, whereas in reality there is no increase in production. GNP does not adequately account for the output of the informal or non-registered sector of the economy. GNP does not allow for differences in climate and conditions of life that require different types of clothing, food, transportation and housing. Economic growth and industrialization involve substantial costs that

do not occur in non-industrial societies: the costs of transporting goods and people, the costs of the disposal of waste and the costs of urban living. The costs of environmental pollution and depletion of natural resources are not adequately accounted for in the measurement of national income. International comparisons of national incomes are usually made with exchange rates. Dollar incomes of developing countries calculated with exchange rates do not provide us with realistic of standards of living in these countries. Relative levels of prosperity in developing countries are higher than suggested by official international statistics in dollars. One of the reasons for this is that many services and domestically traded goods in developing countries are much cheaper than in prosperous countries.

Substantive objections to the use of GNP as an indicator of development are all based on the fact that development involves much than economic growth only. Even from an economic point of view, GNP does not provide us with a good picture of the changes in the life circumstances of the poor masses. Per capita GNP is an average figure. It does not account for the distribution of income and consumption, which is often very unequal. Furthermore, the level of the national income is not directly related to the standard of living. When a considerable part of a country's national income is invested or used for military spending, consumption of the inhabitants of this country may for many years lag far behind the growth of the national income.

Despite increases in national income, living conditions of the very poorest groups in a society may thus deteriorate. In other countries, their situation may improve in spite of a stagnation or slow growth of GNP. From this perspective, it is argued that various other economic and social indicators give a more straightforward picture of developments in a country: the number of people below poverty thresholds, data on malnutrition, employment figures, life expectancy at birth, infant mortality, numbers of doctors, nurses of hospital beds for every thousand inhabitants, energy consumption, miles of roads and railways, access to clean water, equal opportunities for both men and women, human rights, and so forth.

Since 1990 the United Nations Development Programme (UNDP) publishes the Human Development Report (HDR), which reports on many of these indicators annually. This report has introduced a measure called the Human Development Index (HDI). The HDI is a non-weighted average of three variables: an index of per capita gross domestic income ^{§2a} gross domestic income, life expectancy at birth and the level of education. In the income index the income categories above the poverty threshold are given progressively lower weights in order to represent the declining marginal utility of higher incomes. The education index is a weighted average of literacy (two-thirds) and the average number of years of schooling (one-third). A country's ranking on the Human Development Index may differ substantially from its ranking in terms of per capita income.

These indicators are a valuable addition to the national income data. Still, in practice, they have not yet superseded per capita GNP as a summary indicator of the level of development because firstly, the quality of many social indicators is often still inadequate for international comparisons of levels and trends between many countries. In contrast, work on standardization of concepts and measuring techniques with regard to national income has already been continuing for many decades. Secondly, the weighting of social indicators is rather arbitrary. For instance, if higher incomes get lower weights, one automatically gets a different ranking. Thirdly, in the longer run many social indicators appear to be closely connected with per capita national income trends. At any given moment, large discrepancies can be found between the rank order based on income and the rank order based on social indicators for health or life expectancy. These discrepancies provide an interesting indication of policy priorities and institutional influences. However, if per capita national income in a country stagnates over time, this will sooner or later be reflected in a deterioration of the social indicators, while income growth is reflected in improvements in social indicators. The development of gross domestic product provides an indication of the development of a country's productive potential. How this capacity will be used cannot be known in advance. For example, it may be used for fulfillment of basic needs, health care, education or for military hardware, foreign payments or conspicuous by the elites. This depends very much on the social policies pursued in a country. In any

event it is a well-established fact that there can be no long-term improvement of the living conditions of the masses of the population without a corresponding growth of productive capacity. Increase in per capita income is one of the important elements in all definitions of the development concept.

(i) Human Development Index:

The search for a comprehensive measure that could capture the various dimensions of human development led to the definition and formulation of Human Development Index (HDI) by United Nations Development Programme (UNDP). As per the Human Development Report (HDR) which brings out this index every year since 1990 the HDI is a composite index that measures the average achievements in a country in three basic dimensions of human development: a long and healthy life as measured by life expectancy at birth; knowledge, as measured by the adult literacy rate and the combined gross enrolment ratio for primary, secondary and tertiary schools; and a decent standard of living, as measured by GDP per capita in purchasing power parity (PPP) US Dollar. HDR 2005 refers to the year 2003 covering 175 countries. It is based on three components:

(a) Average life expectancy: It includes food, malnutrition, medical care, housing, environmental cleanliness.

(b) Knowledge/educational attainment: In 1990 it was measured on the basis of literacy percentage. But it is necessary but not a sufficient condition. In 1991 the method was modified. It was then measured by two parameters. First was adult literacy. It had a weightage of 2/3 and

second was mean years of schooling. But availability of data was a problem since 1995, hence mean years of schooling was removed by combined enrollment ratio. Primary enrollment is taken as a percentage of the age group of say 5-10. Same data may be collected for secondary level or for higher education. Then we take the combined enrollment percentage. This was given 1/3rd weightage.

(c) Adjusted GDP per capita: It was calculated at PPP dollars where purchasing power of each currency has been taken into account.

All the three parameters are measured in different units. For all these some minimum and maximum values are assured. For example in case of life expectancy 30 years back the minimum value for the whole of the globe in a poor country was 25 years and after 30 years maximum life expecting will be 85 years. In literacy minimum value is zero and a maximum value is 100%. In case of per capita income expressed in PPP dollars 30 years back minimum per capita income was 100 dollar and maximum value is 40,000 PPP dollars. Then for each component we calculate some index and finally a simple average of the three indexes is taken.

$$\text{Index } X = \frac{\text{Actual } X_i \text{ Value} - \text{Min } X_i \text{ Value}}{\text{Maximum } X_i \text{ Value} - \text{Min } X_i \text{ Value}}$$

Where i = average life expectancy, educational attainment, adjusted GDP per capita

Generally UNDP is collecting figure for 177 countries and it is published in its annual Human Development Reports. An abridged form of the latest report available is given here.

Table 1: UNDP's Human Development Index, 2003

HDI Rank	Country	HDI Value (2003)	GDP Per Capita (PPP US \$) 2003	GDP Index	GDP Per Capita PPP US \$ Rank Minus HDI Rank
High Human Development Countries					
1	Norway	0.963	37670	0.99	2
2	Iceland	0.956	31243	0.96	4
3	Australia	0.955	29632	0.95	7
7	Switzerland	0.947	30552	0.96	1
10	United States	0.944	37562	0.99	-6
11	Japan	0.943	27967	0.94	2
15	United Kingdom	0.939	27147	0.94	3
16	France	0.938	27677	0.94	-1
20	Germany	0.93	27756	0.94	-6
25	Singapore	0.907	24481	0.92	-4
52	Cuba	0.817	--	0.67	40
Medium Human Development Countries					
57	Trinidad & Tobago	0.801	10766	0.78	-6
58	Libyan Arab Jamahiriya	0.799	--	0.72	9
61	Malaysia	0.796	9512	0.76	-3
62	Russian Federation	0.795	9230	0.76	-3
63	Brazil	0.792	7790	0.73	1
65	Mauritius	0.791	11287	0.79	-16
85	China	0.755	5003	0.65	11
93	Sri Lanka	0.751	3778	0.61	17
96	Maldives	0.745	--	0.65	2
110	Indonesia	0.697	3361	0.59	5
127	India	0.602	2892	0.56	-9
129	Myanmar	0.578	--	0.39	34
134	Bhutan	0.536	1969	0.5	0
135	Pakistan	0.527	2097	0.51	-5
136	Nepal	0.526	1420	0.44	15
139	Bangladesh	0.52	1770	0.48	-1
145	Zimbabwe	0.505	2443	0.53	-20
Low Human Development Countries					
146	Madagascar	0.499	809	0.35	24
175	Burkina Faso	0.317	1174	0.41	-20
176	Sierra Leone	0.298	548	0.28	1
177	Niger	0.281	835	0.35	-8

Source: UNDP (2005), *Human Development Report*, Oxford University Press, New York.

Those countries having HDI index below 5 are considered to be having low human development index between 0.5 and 0.8 are having medium level human development and countries exceeding 0.8 are those with high level of human development. Norway is the country with the highest human development and Niger is the country with the lowest human development. 57a

India has been characterized as a country with a low level of human development with the country's rank in HDI calculated by the UNDP being 127th among 177 countries in 2003(HDR, 2005). At this level, the position of India is lower to that of her neighbors Sri Lanka and China. However there has been a marginal increase in the human development index value of India from 0.412 in 1975 to 0.602 in 2003 (Table-1).

(ii) Other Indicators:

The indicators used by HDI ignore some distributional concerns as it overlooks the large variances between distinct groups of people, in particular men and women. In order to measure these variances the idea of gender related development index (GDI) was introduced in HDR 1995. While HDI measures average achievement, the GDI adjusts the average achievements to reflect the inequalities between men and women. The GDI measures achievements in the same dimensions and variables as the HDI do, but take account of inequality between men and women. The greater the gender disparity in basic human development, the lower a country's GDI compared with its HDI. Like HDI, India also suffers from low value of GDI, that is, 0.586(HDR, 57b)

2005). India's rank in terms of GDI happens to be 90th out of the 140 countries of the world, implying higher levels of inequality between men and women. The Human development Report of 1996 also presented a study of disaggregated GDI for 16 states in basic female capabilities. At the top of the list was Kerela with GDI value of 0.597 whereas Uttar Pradesh was at the bottom with the GDI value of 0.310 which was almost half that of Kerela.

In addition, the Human Development Report of 1997 introduced the concept of Human Poverty Index (HPI). There are two categories of HPI one is HPI-1 which is for developing countries and the other is HPI-2 which is for developed countries.

Table 2: A Comparison of Different Indexes

Country	HDI Rank (2003)	HPI-1 Rank (2003)	GDI Rank (2003)
Japan	11	--	14
Singapore	25	6	--
Korea	28	--	27
Malaysia	61	16	50
Thailand	73	28	57
Philippines	84	35	63
China	85	27	64
Sri Lanka	93	42	66
Maldives	96	37	--
Vietnam	108	47	83
Indonesia	110	41	87
India	127	58	98
Bhutan	134	--	--
Pakistan	135	68	107
Nepal	136	74	106
Bangladesh	139	86	105

Source: UNDP (2005), Human Development Report, Oxford University Press, New York.

In fact, this was an attempt to bring together in a composite index the different features of deprivation in the inequality of life to arrive at an aggregate judgment on the extent of poverty in a

community. It measures the deprivation in basic human development in the same dimensions as in HDI. In order to get a complete idea of poverty, one has to enlarge the canvas of study and talk in terms of deprivations and not merely income ^{59a} as it is in the deprivation of the lives that people can lead that poverty manifests itself. Poverty is thus denial of choices and opportunities for living a tolerable life. However, given the fact that the issues of poverty in the developing countries involve hunger, illiteracy, epidemics and the lack of health services or safe water, the HPI focuses on the deprivation in the three elements of human life longevity, knowledge and a decent standard of living. However the human poverty in India is very high. One major indicator of human poverty is survival deprivation. In India, nearly one sixth of the population is not expected to survive beyond the age of 40. As per HDR 2005, even in China, Sri Lanka, Malaysia, Argentina, Cuba, Chile and Costa Rica less than 7 percent of the people are expected to die before reaching the age of 40 years as compared with 16.4 percent in India. In HDR 2005, HPI has been computed for 103 developing. India rank is 58th, while that of China is 27th and that of Sri Lanka is 42 (Table-2).

(iii) International Comparisons based on Purchasing Power Parities:

As far as international comparisons of national incomes are concerned the major hindrance is that the value of the currency is not the same in every country. As an example one American dollar is not equal to one Indian rupee. The only relation between these two

currencies is through the exchange rates which generally never have a one to one relationship like one dollar being equal to one rupee. One of the important advances in the measurement of national income is the development of purchasing power parities (PPPs). Exchange rates do not provide adequate measures^{60a} of the purchasing power of currencies because they are based on internationally traded goods only and they are distorted by policy interventions and also influenced by global capital flows. For many years, researchers have been trying to overcome the disadvantages of the use of exchange rates in international comparisons, by calculating measures that explicitly take into account the relative purchasing power of the currencies of the countries being compared. These PPPs are based on price comparisons of a standardized basket of goods and services collected in over 130 countries. By now PPP-based estimates of national income have become available for many countries, though it should be stressed that the quality and reliability of these estimates still varies substantially. The method for calculating PPP is based on revaluation^{60b} of GDP of two countries by selecting comparative aspect of goods and services and estimative to each item is country A relative to country B. We have a selected basket of goods and services. For each good we adopt a method. P_{iA} is price of item 'i' in country A and P_{iB} is the price of item 'i' in country B. We have to calculate PPP equivalent of item 'i' in country A relative to country B i.e. P_{iA}/P_{iB} . By extending this calculation to selected goods and services and multiplying by average quantities consumed in both the countries we get a formula

for overall purchasing power equivalent to country A to country B. We extend this method to a large number of commodities $\sum Q_i O_i A / \sum Q_i P_i B$ where Q_i is the geometric mean of the quantity of goods consumed in a country.

61 a

The use of purchasing power parities has several important effects. In the first place, the dollar incomes of the poorest countries tend to be two to four times higher than their dollar incomes calculated with exchange rates. PPP-based comparisons provide a more realistic picture of poverty, because they take into account the relative cheapness of services and basic necessities in developing countries. A second effect of the use of PPPs is that the income ranking of countries can change quite substantially, also amongst developing countries themselves. Finally, the inequality of average per capita income in the poorest countries tend to be higher, while income in the richest countries tend to be lower than estimates based on exchange rates.

Of course, the use of PPPs changes nothing in the underlying reality of poverty and destitution in larger parts of the world. It does result in more adequate descriptions and measurements of poverty and affluence. Therefore, it is likely that PPPs will be used ever more frequently, in spite of all the technical problems involving in their estimation.

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(iv) Classification of World Economies:

The World Bank in its annual World Development Reports classifies the countries of the world on the basis of Gross National

Income Per Capita which is gross national income of a particular country divided by the midyear population of the concerned country. GNI measures the total value added from domestic and foreign sources claimed by residents. In other words it is GDP added to net primary income receipts from foreign sources.

Table 3: WDR's Classification of World Economies

Country	Population	GNI		PPP (GNI)		GDP
	millions	\$ billions	\$ per capita	\$ billions	\$ per capita	% growth
	2004	2004	2004	2004	2004	2003-4
Low Income	2338.1	1184.3	510	5279	2260	4.4
India	1079.7	674.6	620	3347	3100	5.4
Middle Income	3006.2	6594.2	2190	19483	6480	6
Lower Middle Income	2430.3	3846.9	1580	13709	5640	6.2
Upper Middle Income	575.9	2747.8	4770	5814	10090	5.9
High Income	1000.8	32064	32040	31000	30970	2.8

Source: World Bank (2006), *World Development Report-Equity and Development*, Oxford University Press, New York.

Countries with GNI per capita less than \$825 are classified as Low income countries, and those with GNI per capita between \$826 and \$10,065 are called Middle income countries and those with more than \$10,066 are called as High income countries. The Middle income group is further divided into Lower middle income group and Upper middle income group with \$ 3,255 as the dividing line. India with GNI per capita income of \$620 falls under the category of Low income group.

(v) India's National Human Development Report, 2001:

Motivated by UNDP's Human Development Report, the Planning Commission of India in 2002 came out with its own National Human Development Report which would reflect on India's economic and

social progress and which could bring out inter-regional and inter-temporal changes and responsiveness to policy matters on various aspects of human development. 63 a

Table 4: India's State-Wise Human Development Index

State / UT	1981		1991		2001	
	Value	Rank	Value	Rank	Value	Rank
Andhra Pradesh	0.298	9	0.377	9	0.416	10
Assam	0.272	10	0.348	10	0.386	14
Bihar	0.237	15	0.308	15	0.367	15
Gujarat	0.36	4	0.431	6	0.479	6
Haryana	0.36	5	0.443	5	0.509	5
Karnataka	0.346	6	0.412	7	0.478	7
Kerala	0.5	1	0.591	1	0.638	1
Madhya Pradesh	0.245	14	0.328	13	0.394	12
Maharashtra	0.363	3	0.452	4	0.523	4
Orissa	0.267	11	0.345	12	0.404	11
Punjab	0.411	2	0.475	2	0.537	2
Rajasthan	0.256	12	0.347	11	0.424	9
Tamil Nadu	0.343	7	0.466	3	0.531	3
Uttar Pradesh	0.255	13	0.314	14	0.388	13
West Bengal	0.305	8	0.404	8	0.472	8
India	0.302		0.381		0.472	

Source: National Human Development Report 2001, Planning Commission, Government of India, March 2002

As is evident from Table-4 there are considerable difference in the level of attainments of people on various aspects of well-being depending on their place of residence. Table-4 gives the HDI for 15 major states combining both rural and urban areas for the period 1981, 1991 and 2001. It shows that at the national level, HDI, which takes the value between 0 and 1, has improved from 0.302 in 1981 to 0.381 in 1991 and further to 0.472 in 2001. At the state level, the HDI varies between 0.638 in case of Kerela and 0.367 in case of Bihar. On the whole, while Tamil Nadu, Rajasthan and Madhya Pradesh improved their HDI significantly in the eighties, in nineties the

momentum was maintained only in case of Rajasthan, Madhya Pradesh, Orissa and Uttar Pradesh. Tamil Nadu improved its ranking 4 positions from 7 to 3, while Rajasthan from 12 to 9 and Madhya Pradesh from 14 to 12. On the other hand, position of Assam dropped from 10 to 14, Andhra Pradesh from 9 to 10, Gujrat from 4 to 6, Karnataka from 6 to 7 and Maharashtra from 3 to 4. In case of Bihar, its rank is the lowest among Indian states and Kerela is the highest during 1981-2001.

2 (III) DETERMINANTS OF ECONOMIC DEVELOPMENT:

(i) Natural Resources:

Until the 1930s development of an economy was often explained in terms of the relative quantities of natural resources available. Jacob Viner²⁶ has stated, "Much obviously depends on the character of the physical environmental or the 'quality' in my terminology, of the natural resources considered as factors of production..... An unfavorable physical environmental can be a major obstacle to development." Indeed, development and prosperity of a number of countries may be associated among other things, with the type and size of the resources base they have. Availability of fertile soil with abundant water supply provides favorable condition for agricultural development. Similarly, adequate resources of coal and petroleum and water resources for electricity generation can be profitably utilized by an underdeveloped country for its transformation into a developed country. Minerals like iron ore, copper, tin, bauxite and uranium, if available in plenty can induce the process of industrialization. Sea

coast provides navigation facilities for overseas trade. As it has happened in Japan and Scandinavian countries, coast can prove to be a source of abundant supply of fish. Without these resources there is not much hope for economic development. The natural endowments of a country place general limits on the possibilities of economic development. However, resources availability is not a sufficient condition for human progress. A number of countries in Latin America, Africa and Asia are favorably endeavored with natural resources, yet their achievements in terms of economic progress are rather disappointing. Many parts of the world which are presently underdeveloped are poor in terms of natural resources. Cases of Afghanistan and Tibet are often cited to prove the lack of natural resources to be a major obstacle to development. But this point is not to be stretched too far, as man often succeeds in overcoming the problems arising from the scarcity of natural resources. Switzerland for example is scarce in almost all the physical resources, yet in wealth per capita it ranks as high as Germany, Britain and USA which are rich in their physical endowments. Furthermore, the relative role of natural resources in economic development of a country tends to decline as economy grows.

(ii) Economic Factors:

In a country's economic development the role of economic factor is decisive. The stock of capital and the rate of capital accumulation in most cases settle the question whether at a given point of time a country will grow or not. There are a few other economic factors which

also have some bearing on development but their importance is hardly comparable to that of capital formation. The surplus of food grains output available to support urban population, foreign trade conditions and the nature of economic system one some such factor whose role is economic development has to be analyzed.

(a) Capital formation: The strategic role of capital in raising the level of population has traditionally been acknowledged in economics. With the development of growth economic in the post World War II period its role in economic progress has been increasingly emphasized. In fact the Harrod²⁷ Domar²⁸ model of growth has treated capital as the crucial factor in economic growth. It is now universally admitted that a country which wants to accelerate the pace of growth, has no choice but to save a high ratio of its income, with the objective of raising the level of investment. Great reliance on foreign trade is highly risky and thus has to be avoided. Economists rightly assert that lack of capital is the principal obstacle to growth and no development plan will succeed unless adequate supply of capital is forthcoming.

Whatever be the economic system a country cannot hope to achieve economic progress unless a certain minimum rate of capital accumulation is realized. However, if some country wishes to make spectaculars strides, it will have to raise its rate of capital accumulation still further. Japan has precisely done this in the late years of the 1970s. It had stepped up its saving rate to 37% of GDP. Until recently in some other countries such as South Korea, Thailand,

Malaysia, Hong Kong and Singapore saving rate were as high as 33% or more. The high rate of capital formation in all these countries provides an explanation of their high rate of growth in recent years. In contrast the rate of capital formation in India in the 1970s had fluctuated around 15% of the GDP and only recently has risen to 30%.

Ragnar Nurkse²⁹ has elaborately discussed the problem of capital formation in underdeveloped countries. On the demand side he has argued that there is a problem of small size of the market which fails to provide inducement to big scale instrument activity. On the supply side low level of per capita income and the demonstration effect in respect of consumption don't permit improvement in the level of saving. Hence, the task of stepping up the rate of capital formation in the less developed countries is a really difficult.

(b) *Agricultural surplus:* Increase in agricultural production accompanied by a rise in productivity is important from the point of view of the development of a country. But what is more important is that the marketable surplus of agriculture increases. The term marketable surplus refers to the excess of output in the agricultural sector over and above what is required to allow the rural population to subsist. The importance of the marketable surplus in a developing country rises from the fact that their urban industrial population subsist on it. With the development of an economy, the ratio of the urban population increases and increasing demands are made on agriculture for food grains. These demands must be met adequately;

otherwise the consequent scarcity of food in urban areas will arrest growth.

In case a country fails to produce a sufficient marketable surplus, it will be left with no choice except to import food grains which may cause a balance of payment problem. Until 1976-77 India faced precisely this problem in most of the years during the earlier planning period, market arrivals of food grains were not adequate to support the urban population. In order to avert food crisis in cities, the government imported food grains in large quantities. Although it solved the problem but at the same time it involved large scale spending of foreign exchange which if used for other purposes, would have contributed more to the economic development of the country. Hence, if some country wants to step up the tempo of industrialization it must not allow its agriculture to lag behind. The supply of the farm products particularly food grains must increase, as the setting up of industries in cities attracts a steady flow of population from the countryside. In a way the marketing surplus sets the limits to the possible rate of growth.

(c) *Conditions in foreign trade:* The classical theory of trade has been used by economists for a long time to argue that the presently less developed countries should specialize in production of primary products as they have a comparative cost advantage in their production and should accordingly specialize in them. Protectionists had argued that free trade based on this kind of specialization was not beneficent to a developing economy. In the recent years, a powerful

school of thought has flourished which questions the merits of unrestricted trade between developed and underdeveloped countries. Unlike classical and neo-classical economists, Prebisch³⁰ looks at the relation between trade and development from the stand point of balance of payments rather than real resources. He asserts that leaving aside some exceptional cases, unrestricted trade results in deficits in the balance of payments of developing countries. In addition, their terms of trade also deteriorate vis-à-vis developed countries. These disadvantages of free trade generally far outweigh any advantage with respect to a more efficient allocation of resources. Foreign trade has proved to be beneficial to countries which have been able to set up industries in a relatively short period. These countries sooner or later captured international markets for their industrial products. Therefore, a developing country should not only try to become self-reliant in capital equipment as well as other industrial products as early as possible, but it should also attempt to push the development of its industries to such a high level that in course of time manufactured goods replace the primary products as the country's principal exports.

Both in Japan and Germany in the early phase of their development export of manufactured goods had played a crucial role in their economic progress. In recent decades, adoption of an export led growth strategy has enable countries like the Republic of Korea, Malaysia, Hong Kong and Thailand to register spectacular economic growth. However these experiences are not sufficient to suggest that

all less developed countries will inevitably register high growth rates if they adopt trade liberalization policies. In countries like India the macro-economic interconnection are crucial and the solutions of the problems of these economies cannot be found merely through the foreign trade sector or simple recipes associated with it.

(d) *The economic system:* The economic system and the historical setting of a country also decide the development prospects to a great extent. There was a time when a country could have a laissez faire economy and yet facing no difficulty in making economic progress. England's economy was precisely the one in which there was minimal government intervention and yet it steadily developed over a long period. In today's entirely different world situation, a country would find it difficult to grow along the England's path of development. The Third World Countries of the present times will have to find their own path of development. They cannot raise necessary resources required for development either through colonial exploration or by foreign trade. They now have only two choices before them. First, they can follow a capitalist path of development which will require an efficient market system supported by a rational interventionist role of the state. The other course open to them is of economic planning. The latest experiments is economic planning is China have shows impressive results. Therefore, from the failure of economic planning in the former Soviet Union and the east while East European socialist countries it would be wrong to conclude that a fully centralized and

planned economy has built in inefficiencies which are bound to arrest economic growth.

(iii) Institutional Factors:

Countries like Japan, Switzerland, and Luxemburg are quite developed but are poor in natural resources. In the era of globalization capital is no more a constraint. FDI and MNCs take advantage of cheaper resources in developing countries. After saturation in advanced countries FIIs have shifted to developing countries like China, Singapore, Malaysia etc. Technical progress can now be achieved through foreign collaboration and payment to be made for technology is very small part of gains on GDP.

(a) Type of government: Monarchy is not helpful for development. Democracy is successful in advanced countries as individuals and firms in these countries show rational behaviors but democracy is not successful in poor countries where illiteracy rate is quite high. Two party system is successful but multiparty system is a failure. One party government is strong but coalition is weak. Vote bank politics has adverse effects on economy. There is a clash between nationalism, self interest and regional politics.

(b) Good governance: It leads to the proper implementation of the visions of political leaders and parties. It is based on right type of policies and strict enforcement. For example, in Japan after Second World War government supported iron and steel industry and ship building. Later on it switched over to electronics. There was full government support. In Malaysia P.M. Mahathir in 1980 gave his

vision 2010 which was a 30 year programme. There was good implementation. In China, Mao Tse, Tsang good policies were followed by strict implementation. India's poor performance can be attributed to poor implementation of policies.

(iv) Social and Cultural Factors:

Homogeneous societies like that of Korea, Japan, China, and Europe have an advantage over heterogeneous societies of India Pakistan and Sri Lanka. A group economically integrated with a large economy has better opportunities to develop like Jews in USA and Chinese in Malaysia. Economic separation of a group from a larger economy results in lower productivity and poor prospects of growth like minorities in India, Pakistan and Bangladesh.

USA, Japan, Korea, China, EU has work cultural, discipline and good entrepreneurship. These traits that perpetuate poverty are result of centuries of social accumulation and cannot be changed quickly. Cultural advancement according to Olson³¹ result in two types of human capital.

(a) Marketable human capital: Qualities like more skill, propensity to work harder more entrepreneurial personality resulting in increase in quality and quantity of productive capital. This results in increased income of persons groups as well as nations.

(b) Civic culture: It refers to electing good government that results in good governance and better policies along with a disciplined society, integrity in tax payment and public expenditure. All these, lead to better infrastructure and better provision of public goods.

(v) Scientific Temper:

It helps in adoption of new technology and innovation which are often resisted in orthodox economies like opposition of privatization of insurance, power and banks and computerization etc. Ignorance, superstition, and casteism check trickling down of scientific culture to the lower strata. It is the non-scientific culture based on superstition and traditional belief and suppression of capitalism that has led to the underdevelopment of India. There are three major institutions which result in economic development: (i) Political Rights, (ii) Capitalism and (iii) spread of Scientific Culture. Out of these India has fully accepted only political rights.

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CHAPTER-III

PATTERN OF GROWTH OF THE INDIAN ECONOMY

PATTERN OF GROWTH OF THE INDIAN ECONOMY

The measures like Gross domestic Product or Net National Product have been key indicators in the economic policy making. These measures are part of the national income accounts developed in each country, whose objective is to provide a database for macroeconomic analysis. Besides this, these indicators were for a long time used as a measure of the economic progress of a country and also as a measure of standard of living. A national income estimate measures the volume of commodities and services turned out during a given period counted without duplication. Basically it measures the net value of goods and services produced and net foreign earnings during a given year.

3 (I) SOME BASIC CONCEPTS OF NATIONAL INCOME:

(i) Gross Domestic Product:

It is the total money value of all the final goods and services, counted without duplication, produced by residents and non residents within the geographical boundaries of the country during a given period of time. There are four basic components of GDP. First is private consumption or the consumer expenditure in the economy which includes most household expenditure such as food, rent, medical expenses, etc. The second is capital investments in business which refers to non-financial investments, such as construction of a new building, purchase of machinery and equipment for a factory. The

buying of financial products in macroeconomic terms, is known as 'saving', whereas investment is capital spending. The underlying logic is that if money is transformed into goods or services without a liability to repay, it is an investment. Buying financial goods, such as shares or bonds is simply perceived as the ownership of money nominally changing hands and not investments, as it is referred to in ordinary speech. The third item is the sum of government expenditure on final goods and services. This includes salaries of Government personnel, purchase of defense weapons, and any investment expenditure incurred by the government, as mentioned above. It excludes all transfer payments such as social security and unemployment benefits. And the fourth item is net exports as exports are added while imports are deducted.

(ii) Gross National Product:

It is the money value of total output of final goods and services, counted without duplication, produced by the nationals of a country during a given year. In other words, it is the sum value of all goods and services produced by permanent residents of a country regardless of their location. When we add net factor income from abroad to GDP, we get GNP. Net factor income from abroad is simply the difference between the factor income which our nationals receive abroad for rendering factor services in other countries and the factor income paid to foreigners for factor services rendered by them in our country.

The important distinction between GDP and GNP rests on differences in counting production by foreigners in a country and by

nationals outside of a country. For the GDP of a particular country, production by foreigners within that country is counted and production by nationals outside of that country is not counted. For GNP, production by foreigners within a particular country is not counted and production by nationals outside of that country is counted. Thus, while GDP is the value of goods and services produced within a country, GNP is the value of goods and services produced by citizens of a country.

(iii) Net National Product:

When depreciation is deducted from GNP we get NNP. Depreciation is nothing but the consumption or use of the fixed capital leading to a fall in the value of fixed capital due to wear and tear. There are two types of estimates. One at market price and the other at factor cost. The difference between these two arises from the fact that subsidies and indirect taxes causes market prices of output to be different from the factor incomes resulting from it. When we deduct indirect taxes and add subsidy to NNP at market cost, then we get NNP at factor cost and this is nothing but National Income.

In this chapter the pattern of growth of the Indian Economy will be studied. While we will be studying the entire period from 1950 to 2006, we will concentrate on the decade of nineties which is basically the period after reforms. Also due to differences in the base years we will in some cases concentrate on few years instead of the whole period from 1991 to 2006, in the period which pertains to a same base year time period.

3 (II) NATIONAL INCOME MEASUREMENTS IN INDIA:

It was only after Independence that systematic official estimates were made. The National Income Committee was formed in August 1949 which constituted of P.C.Mahalanobis, D.R. Gadgil and V.K.R.V.Rao. In April 1951 this committee submitted its first report and the final report was submitted in February 1954. The first report contained the estimates for the year 1948-49. In these reports the total national income was analyzed by industry origin, the character of enterprise and the net output per engaged person in various occupation. The final report contained estimates for the year 1948-49, 1949-50 and 1950-51 both at current prices and constant prices. After independence in 1947, the country saw an urgent need for a statistical framework suitable for economic and social development. P. C. Mahalanobis was appointed as an Honorary Statistical Adviser in 1949 to the Government of India and Central Statistical Unit was setup under his technical guidance which was later named as Central Statistical Organization (CSO) in 1951. This organization was setup mainly to coordinate the statistical work done in various ministries and other government agencies and to advise them, to maintain standards with regard to definitions, concepts and procedures, to provide consultancy, to liaison with international statistical organizations, to prepare and publish a Monthly Statistical abstract and an Annual Statistical Abstract and to inform annual statistical information to public. Later regular estimates began to be published by Central Statistical Organization (CSO). They published the yearly

data both at constant prices and current prices till 1964-65 using the methodology of National Income Committee using 1948-49 as the base year. These estimates are now called as Conventional series. CSO keeps on revising its methodology in order to maintain an update of its estimates. It came out with a Revised Series at 1960-61 prices and current prices for the period 1960-61 to 1964-65 in 1967 which were subsequently carried backward to 1950-51 and forward to 1975-76. These estimates were further revised in 1976-77 at current prices and at constant 1970-71 prices. In CSO came up with another series with 1980-81 as the base year. Again these estimates were projected backwards to provide a total series from 1950-51 onwards for comparison purposes. The base year was again shifted to 1993-94 and at present it stands at 1999-00. That is the base year has been shifted five times so far to 1960-61, 1970-71, 1980-81, 1993-94 and 1999-2000. But at present we don't have estimates for the years 1950-51 to 1999-00 at 1999-00 base year.

3 (III) GROWTH INDICATORS OF THE INDIAN ECONOMY:

(i) Growth Rates:

After averaging the so-called "Hindu rate" of 3.6 percent per year in the thirty years between 1950-51 and 1980-81, GDP growth decelerated to 5.65 percent in the eighties and stayed at this level in the final decade up to 2000-01.

Indeed, if the crisis affected year of 1991-92 is omitted, as it reasonably should be, GDP growth in the eight years from 1992-93 to 1999-00 averaged an unprecedented 6.35 percent. The trend in

decadal growth rates looks even better when we look at per capita NNP growth which accelerated from around 0.8 percent in the seventies to more than 3 percent after eighties. At present it stands at more than 4 percent. If we think of GNP or NNP or per capita NNP or GDP as an indicator for average living standards of India's population, the last two decades have shown welcome performance.

Table 1: Decadal Growth Rates

(Factor cost at 1993-94 prices in percentage)

Year	GNP	NNP	PCNNP	GDP	Standard Deviation of GDP
1951-52 to 1960-61	3.93	3.85	1.9	3.94	2.57
1961-62 to 1970-71	3.72	3.53	1.27	3.74	3.34
1971-72 to 1980-81	2.38	3.1	0.79	3.17	4.13
1981-82 to 1990-91	5.47	5.41	3.22	5.65	2.14
1991-92 to 1999-00	5.84	5.7	3.6	5.79	1.75
2000-01 to 2005-06*	6.5	6.37	4.64	6.5	1.92

Source: Calculated and computed from Economic Survey, 2006-2007, Economic Division, Ministry of Finance, Government of India, Appendix Table No 1.2 and 1.6.

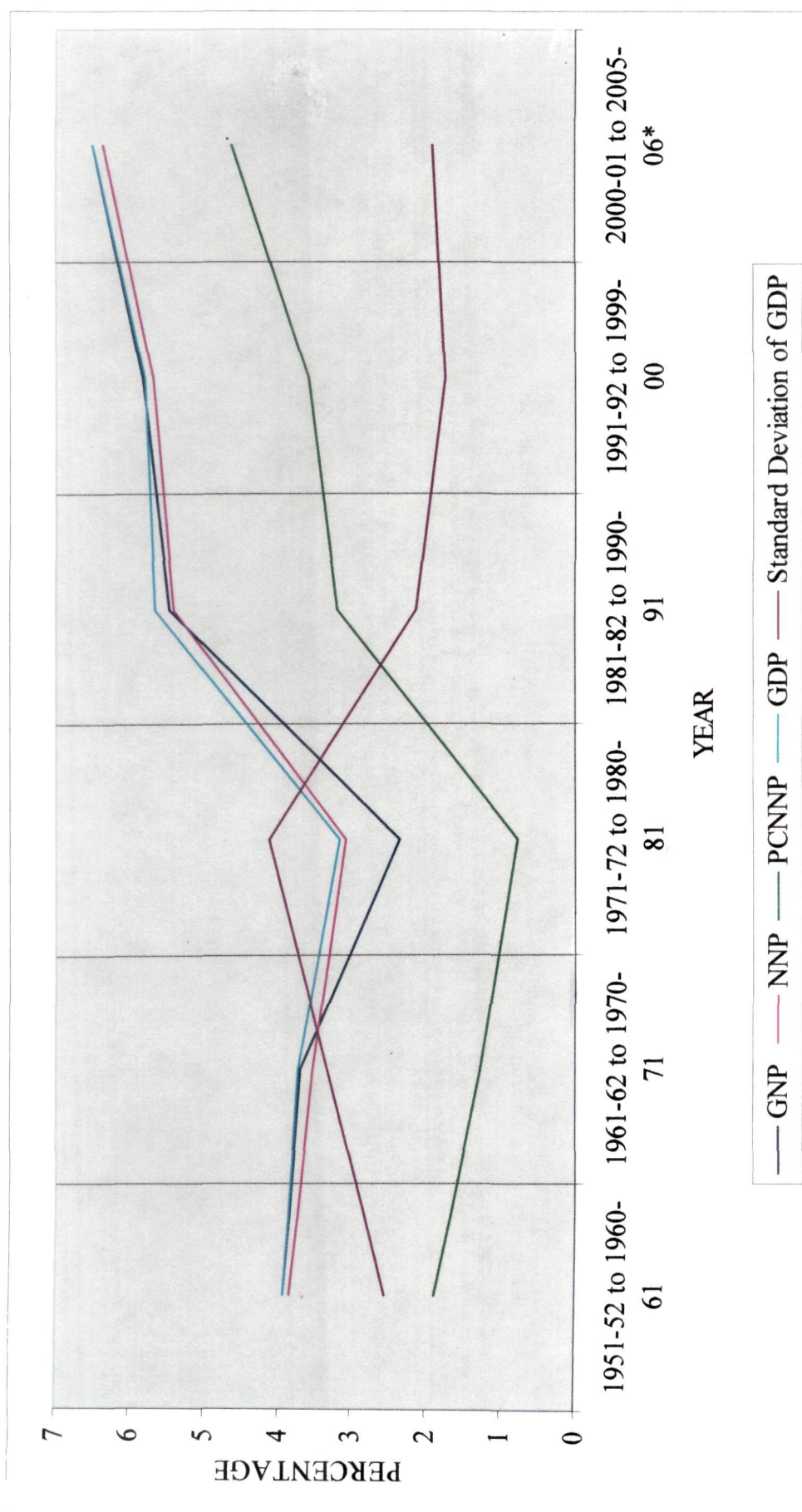
Note: * The estimates for the years 2000-01 to 2005-06 are at 1999-00 prices and hence are not strictly comparable to other estimates with 1993-94 as the base year.

Another encouraging fact is that the fluctuations or more precisely the standard deviations in the growth indicators particularly GDP between the years have declined consistently as is evident from the decline in the standard deviations in the year wise GDP growth rates have consistently declined from 4.13 percent in the seventies to 2.14 percent in eighties to a further low of 1.74 percent in the nineties (Table-1 and Figure-1).

(ii) Sectoral Growth Rates:

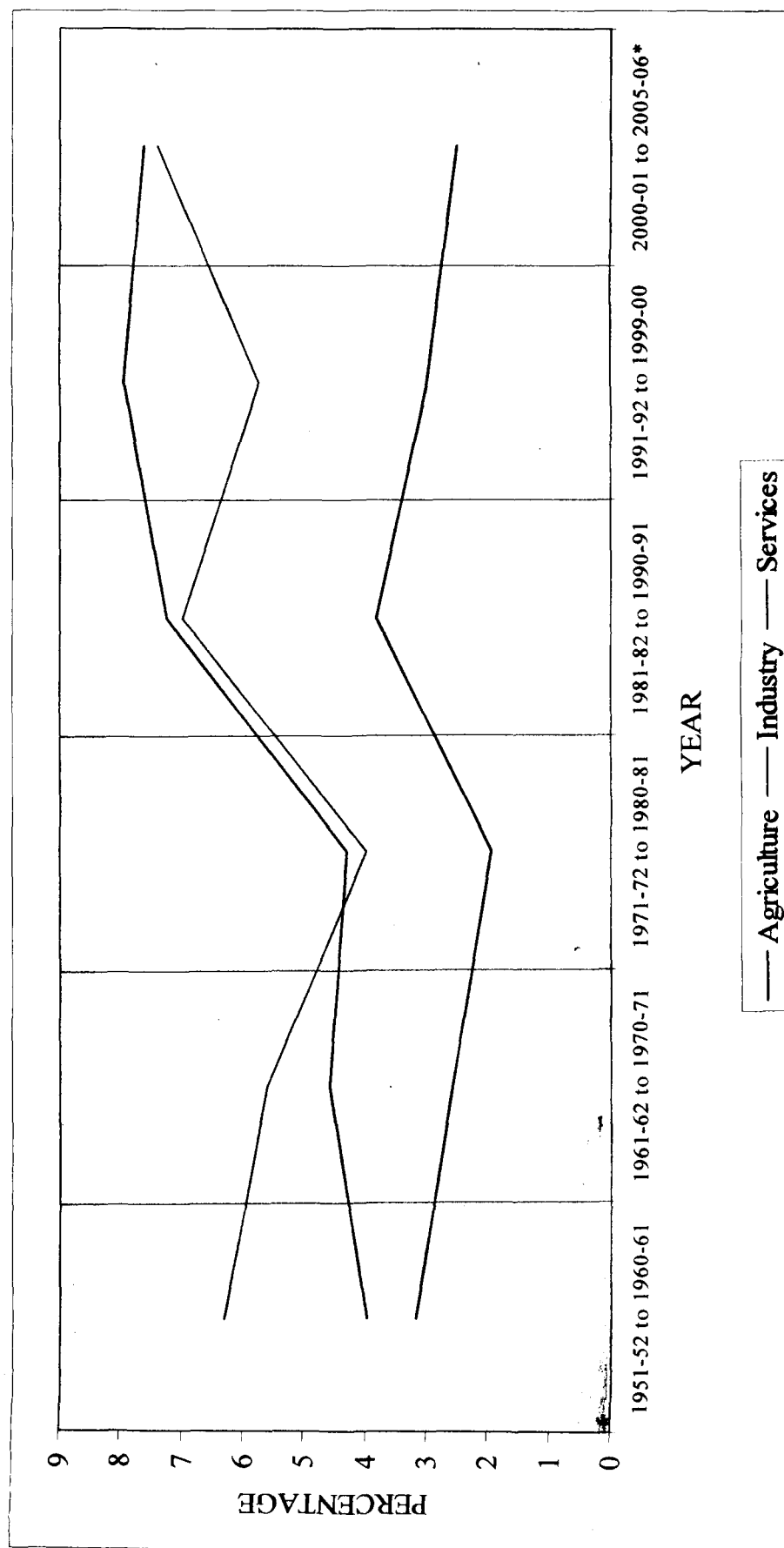
Table-2 and Figure-2 shows the percentage growth in the major sectors, namely Agriculture, Industry and Services since 1951-52. The

FIGURE 1: GROWTH INDICATORS



average growth in agriculture decreased from 3.19 percent in the decade of fifties to 2.58 percent in the decade of sixties and further lowered to 1.95 percent in the next decade of seventies. This is really a bad performance for a developing country like India where agriculture in these periods contributed about 25 percent to the total GDP and where it employs more than 50 percent of the people. In the decade of eighties there was some improvement and the agricultural growth again crossed the 3 percent mark as it reached 3.84 percent but again in the decade of nineties it fell to 3 percent. Again the period after 1999-00 is not comparable to the period before 1999-2000 because of the change in the base year. This is not a good performance that too for a country which is primarily an agricultural country. The average growth in services increased 4 percent in the decade of fifties to 4.58 percent in the decade of sixties, but it lowered a bit in the next decade of seventies to 4.31 percent. But this decline was short-lived as in the decade of eighties there was improvement and the service sector growth it increased to 7.25 percent and it further increased to 7.96 percent in the decade of nineties. Again the period after 1999-00 is not comparable to the period before 1999-2000 because of the change in the base year. This is a success story for the Indian economy. The average growth in services decreased from 6.33 percent in the decade of fifties to 5.61 percent in the decade of sixties and further lowered to 3.98 percent in the next decade of seventies. In the decade of eighties there was improvement and the industrial growth as it increased to 6.98 percent but again in the decade of nineties it fell to 5.75 percent.

FIGURE 2: SECTOR WISE GROWTH RATES



Again the period after 1999-00 is not comparable to the period before 1999-2000 because of the change in the base year.

Table 2: Sector-Wise Growth Rates

(Factor cost at 1993-94 prices in percentage)

Year	Agriculture	Industry	Services
1951-52 to 1960-61	3.19	6.33	4.00
1961-62 to 1970-71	2.58	5.61	4.58
1971-72 to 1980-81	1.95	3.98	4.31
1981-82 to 1990-91	3.84	6.98	7.25
1991-92 to 1999-00	3.00	5.75	7.96
2000-01 to 2005-06*	2.51	7.40	7.64

Source: Economic Survey, 2006-2007, Economic Division, Ministry of Finance, Government of India, Appendix Table No 1.2 and 1.6.

Notes: (i) * The estimates for the years 2000-01 to 2005-06 are at 1999-00 prices and hence are not strictly comparable to other estimates with 1993-94 as the base year

(ii) Agriculture includes forestry & fishing, mining and quarrying.

(iii) Industries include manufacturing, construction, electricity, gas and water supply.

(iv) Services include trade, hotels, transport, communication, financing, insurance, real estate and business service, public administration & defence and other services

(iii) Export Import Ratio:

The increasing dynamism of the Indian economy could be observed from the increasing rate of exports. It grew at only 3.59 percent in the fifties and this growth rate increased to a massive 19.47 percent in nineties. Even between the decades of eighties and nineties there was a significant increase from 16.35 percent to 19.47 percent (Table-3). The statistics for the period after 1999-2000 is again not strictly comparable to the pre 1999-2000 figures because of the change in the base year.

An increase in the imports of a developing country like India is also a sign of the strength of the economy as these imports are very vital for the growth of the economy. In this respect also the Indian economy has shown commendable strength as the percentage growth

of imports grew from 6.15 percent in the decade of fifties to 20.09 percent in the decade of nineties. The change in the rate of growth of imports between eighties and nineties is also commendable as it increased from 14.93 percent to 20.09 percent between the two periods. Again the period after 1999-00 is not comparable to the period before 1999-2000 because of the change in the base year.

Table 3: Average Rate of Change of Exports and Imports
(Percentage)

Year	Export	Import
1949-50 to 1959-60	3.59	6.15
1960-61 to 1969-70	8.87	6.26
1970-71 to 1979-80	16.77	20.73
1980-81 to 1989-90	16.35	14.93
1990-91 to 1999-00	19.47	20.09
2000-01 to 2004-05	18.16	18.42

Source : Calculated and computed from *Economic Survey, 2005-2006*, Economic Division, Ministry of Finance , Government of India, Appendix Table No 7.1 (A)

If we go by the foreign exchange reserves of India the improvement in the Indian economy becomes obvious. If we neglect the decade of 1951-52 to 1960-61 our total foreign exchange reserves have increased from 6,891 US \$million to a whopping 2, 17,329 US \$million in the decade of nineties. If we simply compare the decade of eighties with nineties taking the former as pre-reform period and the latter as the post reform period we see that in these two time periods foreign exchange reserves have increased from 55,791 to 2,17,329 US \$million. Also if we further compare the total reserves of the 10 year period 1991-92 to 1999-00 with the five year from 2000-01 to 2004-05 we find the reserves in the latter period have approximately doubled to 426288 from 217329 US \$million (Table-4).

Table 4: Foreign Exchange Reserves

(US \$million)

Year	Amount	Year	Amount
1951-52 to 1960-61	15,377	2000-2001	42,281
1961-62 to 1970-71	6,891	2001-2002	54,106
1971-72 to 1980-81	32,464	2002-2003	75,428
1981-82 to 1990-91	55,791	2003-2004	1,12,959
1991-92 to 1999-00	2,17,329	2004-2005	1,41,514

Source: Calculated and computed from Economic Survey, 2006-2007, Economic Division, Ministry of Finance, Government of India, Appendix Table No 6.1 (B).

From the above analysis it becomes evident that on the external front India had performed well and obviously credit goes to the reforms package of 1991 and its subsequent reforms.

(iv) Saving Rates:

The virility of the Indian economy could be also observed from the rate of savings. It is good to see that the average gross domestic savings which was only 9.97 percent in the decade of fifties rose to 23.13 percent in the decade of nineties.

Table 5: Saving Rates

(As percent of GDP at current market prices)

Year	Average Gross Domestic Saving	Average Gross Domestic Capital Formation
1951-52 to 1960-61	9.97	11.7
1961-62 to 1970-71	12.66	14.66
1971-72 to 1980-81	17.49	17.63
1981-82 to 1990-91	19.41	21.23
1991-92 to 1999-00	23.13	24.55
2000-01 to 2005-06	27.32	27.57

Source: Calculated and computed from Economic Survey, 2006-2007, Economic Division, Ministry of Finance, Government of India, Appendix Table No 1.5.

Note: The estimates for the years 2000-01 to 2005-06 are at 1999-00 prices and hence are not strictly comparable to other estimates with 1993-94 as the base year.

Even between the decades of eighties and nineties there was a significant increase in the gross domestic savings from 19.41 percent

to 23.13 percent. If we look at the figures of this decade it becomes much more encouraging, but these figures are not strictly comparable to those before 1999-00 as these have been computed at 1999-00 prices where as the earlier figures are at 1993-94 prices.

(v) Sectoral Contribution to Growth:

Traditional literature views the structural transformation in the sectoral composition of GDP as an important aspect of growth and development. If we see the sectoral composition of Indian economy it can be seen that the share of agriculture has decreased from 21.9 percent from 1980-81 to 1990-91 to 14.1 percent from 1991-92 to 2000-01. For the same period the decline for Industry was 32 percent to 28.2 percent and the share of service sector grew from 46.1 percent to 57.7 percent in the same time period.

Table 6: Sectoral Contribution to Growth

(At factor cost in percentage)

Sector	1980-81 to 1990-91	1991-92 to 2000-01	1991-92 to 1996-97	1996-97 to 2000-01	2003-04	2004-05 (P)	2005-06 (Q)	2006-07 (R)
	A		B		C			
Agriculture	21.9	14.1	21.1	5.9	21.7	20.2	19.7	18.5
Industry	32	28.2	30.8	25	25.6	26.1	26.2	26.6
Services	46.1	57.7	48.1	69	52.7	53.7	54.1	54.9
GDP	100	100	100	100	100	100	100	100

Source: "Monthly Economic Report", various issues of CSO, Economic Division, Department of Economic affairs, Ministry of Finance.

Note: (i) A and B estimates are at 1993-94 constant prices.

(ii) C estimates are at 1999-2000 constant prices

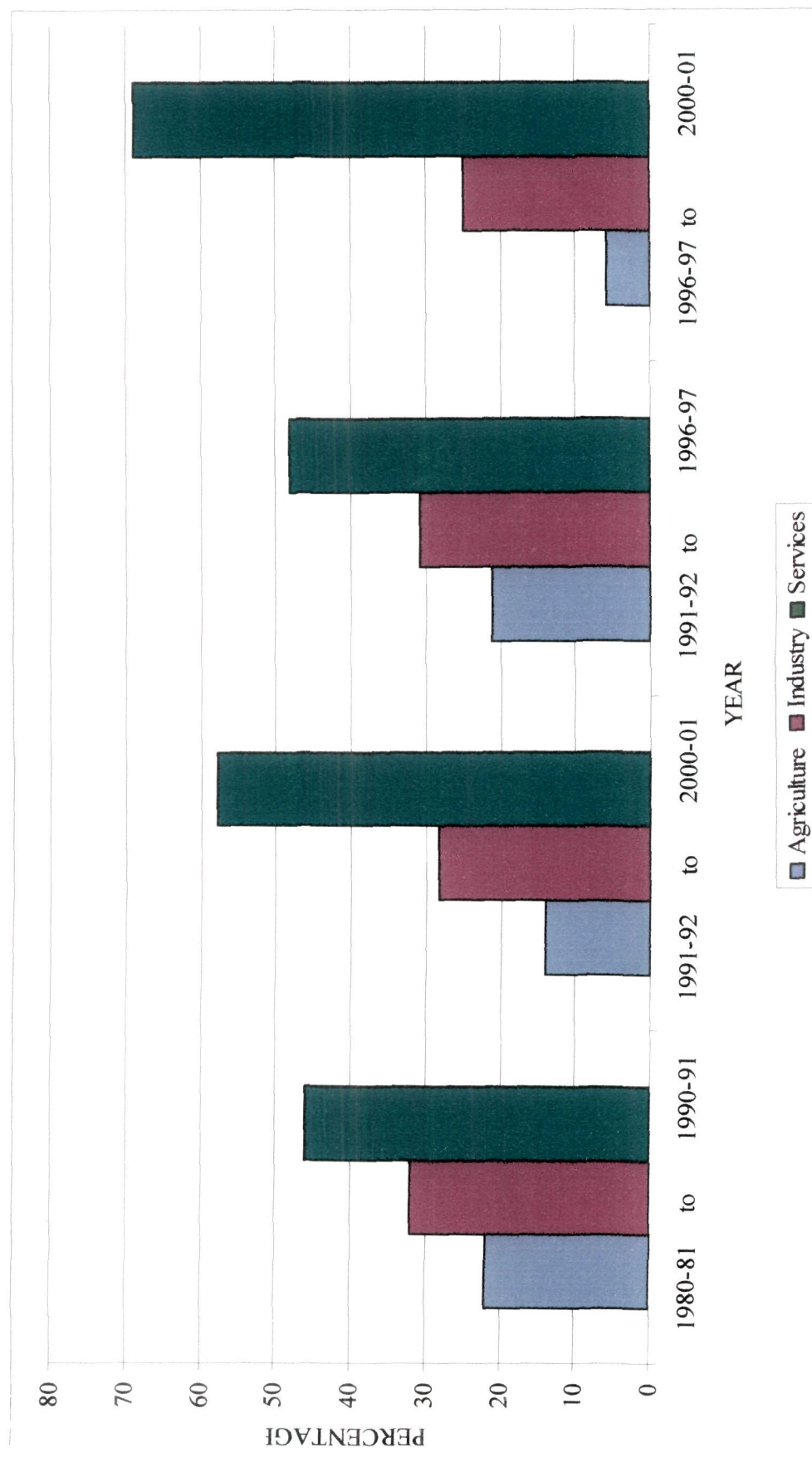
(iii) A and B estimates are average estimates

(iv) C estimates are yearly estimates

(v) P: Provisional, Q: Quick estimates, R: Revised estimates

Another feature arises if we break the decade of nineties into two periods, one from 1991-92 to 1996-97 and the other from 1996-

FIGURE 3: SECTORAL COMPOSITION OF GROWTH



97 to 2000-01. While in the first period agricultural sector contribution was 21.1 percent but in the second time period it was only 5.9 percent. Again the case of service sector in the first half of nineties service sector contributed 48.1 percent while in the second half of nineties this sectors contribution was a major 69 percent. As per the data collected till date the share of agriculture sector is decreasing, share of industry is more or less constant, while that of service sector is increasing. According to the revised estimates of CSO for the year 2006-07 agricultural sectors contribution is 18.5 percent, contribution of industries is 26.6 percent and service sector contribution is 54.9 percent (Table-6).

3 (IV) THE PATTERN OF GROWTH AFTER REFORMS:

GDP growth collapsed to 1.3 percent in 1991-92 as the BOP crisis of 1991 took its toll. The stabilization and structural reform measures of 1991-93 restored macroeconomic stability and we saw a swift recovery to normalcy. GDP growth recovered to nearly 6 percent in 1993-94 and exceeded 7 percent in each of the next three years. Manufacturing recorded average real growth of 11.3 percent in the four years 1993-94 to 1996-97. Export growth in dollar terms averaged 20 percent in the three years between 1993-94 and 1995-96 and the rates of aggregate savings and investment in the economy peaked in 1995-96. Real fixed investment rose by nearly 40 percent between 1993-94 and 1995-96, led by a more than 50 percent increase in industrial investment. It was, manifestly, boom time for the Indian economy.

The year 1997 was a watershed, which rang in the end of the economic party. In particular, three marker events occurred within a six month period to check the momentum of growth. In March, the instability inherent in coalition governments became manifest in the political crisis which ended the Deve Gowda government and ushered in the Gujral version of United Front government. In July, the Thai financial crisis raised the curtain on the Asian Crisis saga, which dominated the international economic arena for next 18 months. Finally, in September the Gujral government announced its decisions on the Fifth Pay Commission Report, decisions which were to prove costly for both the fiscal and economic health of the country. Agriculture recorded negative growth in value added, while the growth of manufacturing slumped to 1.5 percent from 9.7 percent in the previous year. Only services boomed at 9.8 percent. Although industrial expansion remained subdued, GDP growth recovered smartly in 1998-99 thanks to a strong rebound in agriculture and continued buoyancy in services. Growth was sustained in 1999-2000 by a temporary recovery in industry. In 2000-01, renewed industrial deceleration and virtual stagnation in agriculture pulled GDP growth down to 4.0 percent.

The marker events of 1997 are by no means the only reasons for the deceleration in India's economic growth after 1996-97. Others included the petering out of productivity gains reform economic reforms, which clearly slowed after 1994. Although reforms continued throughout the decades, they never regained the breadth and depth of

the early nineties key reforms in the financial sector, infrastructure, labor laws trade and industrial policy, bankruptcy provision and privatization remained unfinished or undone. Real investment in industry, which had risen fast until 1995-96, plateaued thereafter for several seasons including the political instability associated with three general elections and a succession of coalition governments, rising fiscal deficits after 1996-97 which kept real interest rates higher, and the loss of momentum in reforms. Third, despite good intention, the bottleneck in infrastructure became worse over time, especially in power, railways and water supply reflecting slow progress in reforms of pricing ownership and the regulatory framework. Fourth, the low quality and quantity of investment in social infrastructure combined with distorted pricing of some key agricultural inputs and outputs to damp the growth of agriculture. Fifth, the continuing decline in governance and financial discipline in especially the popular states of the gangetic plain constrained growth prospects for over 30% of India's population, finally, aside from the Asian crisis of 1997-98, the economic sanctions of 1998-99 and the rebound of international oil prices in the last two ears have together made the international economic environment less supportive than in the eight plant period.

Advocates of economic reform have repeatedly argued that the decade reform has witnessed India's transition to a new, higher growth trajectory. The typical claim-made by the government and neo liberal sympathizers has been that as compared with the old 'Hindu rate of growth' of around 3.5 percent per annum over the 1990s the

Indian economy was set firmly on a trajectory involving a rate of growth of well over 6 percent. It has been argued that despite the fiscal compression resulting from the government's effort to contain the fiscal deficit in a period. When the tax-GDP ratio was failing, liberalization provided a stimulus to private 'animal spirits' so that increasing private investment more than compensated for the sharp deceleration in public capital formation during the 1990s. Optimistic projections on the bases of this perception have even suggested that the economy could easily achieve a two digit rate of growth in the near future.

(i) Regression Analysis:

As per the traditional school of thought a country is said to be growing if the share of the primary sector is decreasing and that secondary sector and tertiary sector is increasing. In view of the above perspective a multiple regression analysis is done in order to analyze the pattern of growth of the Indian economy. The coefficient of determination, denoted by R square, measures the magnitude of the association of the variables involved in multiple regression.

In order to measure the significance of the analysis P value has been used. The P value is the probability that the hypothesis being tested is true. Here, a P value of 0.05 is taken as the critical level for the rejection of the hypothesis. The coefficient of multiple regression measures the magnitude of the association of the variable involved in the multiple regression. It is denoted by R^2 . In this study F-test has been used to test the significance of R^2 value.

Table 7: Annual Growth Rates

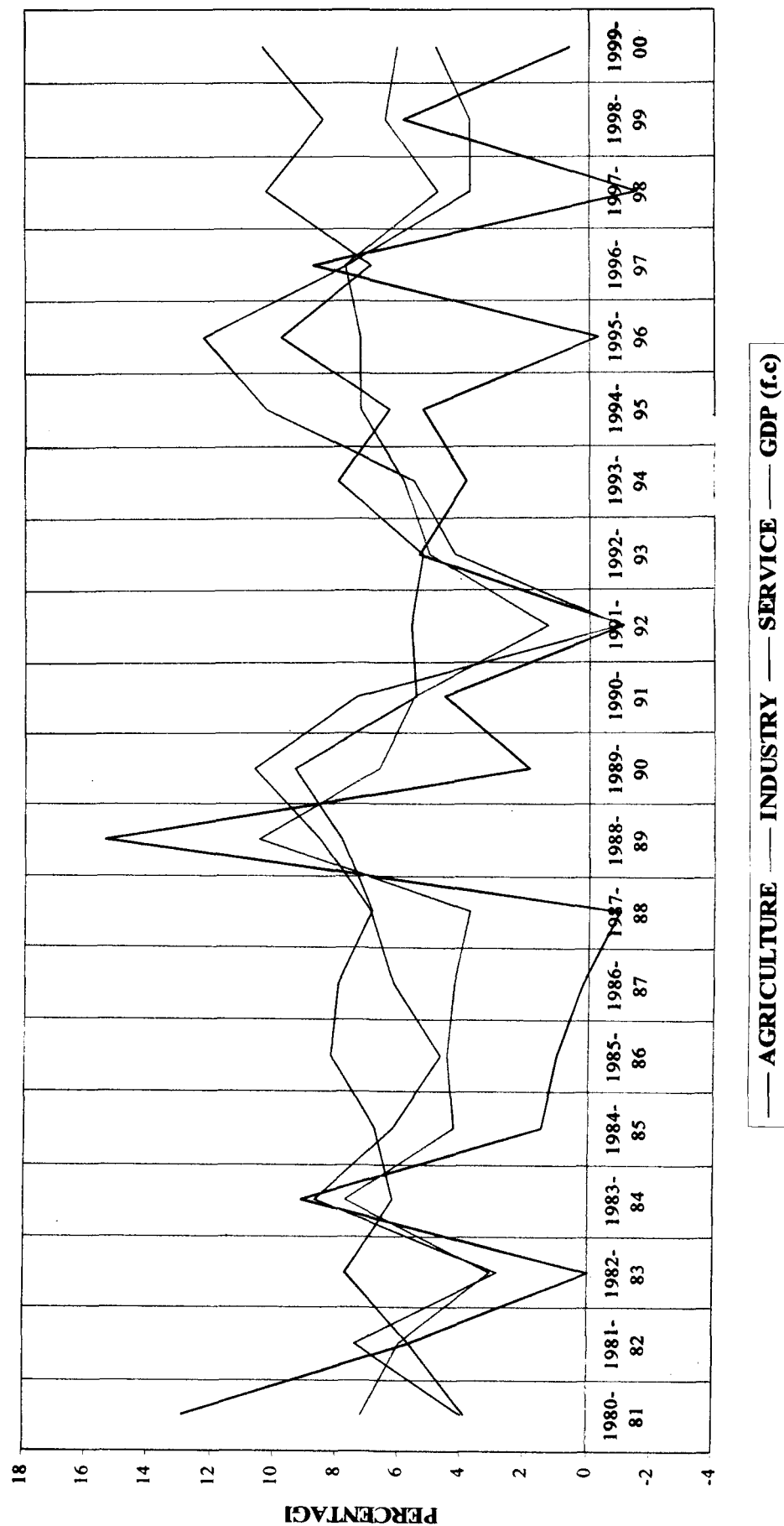
(At factor cost in percentage)

Year	Primary Sector	Secondary Sector	Tertiary Sector	GDP
At constant 1993-94 prices				
1980-81	12.9	4.0	3.9	7.2
1981-82	5.7	7.4	5.7	6.0
1982-83	0.0	2.9	7.7	3.1
1983-84	9.1	8.7	6.2	7.7
1984-85	1.5	6.2	6.8	4.3
1985-86	1.0	4.7	8.2	4.5
1986-87	0.2	6.2	8.0	4.3
1987-88	-1.0	7.0	6.9	3.8
1988-89	15.4	8.6	7.9	10.5
1989-90	1.9	10.7	9.4	6.7
1990-91	4.6	7.4	5.5	5.6
1991-92	-1.1	-1.0	5.7	1.3
1992-93	5.4	4.3	5.3	5.1
1993-94	3.9	5.6	8.0	5.9
1994-95	5.3	10.3	6.4	7.3
1995-96	-0.3	12.3	9.8	7.3
1996-97	8.8	7.7	7.0	7.8
1997-98	-1.5	3.8	10.3	4.8
1998-99	5.9	3.8	8.5	6.5
1999-00	0.6	4.9	10.4	6.1
At constant 1999-00 prices				
2000-01	0.0	6.8	5.4	4.4
2001-02	5.9	2.8	6.84	5.8
2002-03	-5.9	6.9	7.04	3.8
2003-04	9.3	7.8	7.7	8.5
2004-05(P)	0.6	10	9.17	7.6
2005-06(Q)	5.8	10.1	9.66	9.0

Source: Economic Survey, 2006-2007, Economic Division, Ministry of Finance, Government of India, Appendix Table No 1.2 and 1.6.

In this study three regression equations are formed. The first is for the period 1980-81 to 1989-90. This period basically represents the pre-reform period. The post reform period is divided into two

FIGURE 4: ANNUAL GROWTH RATES



periods, one from 1990-91 to 1999-00 and other from 2000-01 to 2005-06, basically because of the change of base year.

(a) Regression equation for the period 1980-81 to 1989-90:

GDP = 0.005 + (0.368) Primary Sector + (0.279) Secondary Sector + (0.309) Tertiary Sector.

R square = 0.998

Adjusted R square = 0.996

Standard error of the estimate = 0.13578

F value = 829.546

P value = 0.000

(b) Regression equation for the period 1990-91 to 1999-00:

GDP = -0.699 + (0.348) Primary Sector + (0.284) Secondary Sector + (0.480) Tertiary Sector.

R square = 0.995

Adjusted R square = 0.992

Standard error of the estimate = 0.16063

F value = 396.703

P value = 0.000

(c) Regression equation for the period 2000-01 to 2005-06:

GDP = -0.277 + (0.265) Primary Sector + (0.249) Secondary Sector + (0.551) Tertiary Sector.

R square = 0.998

Standard error of the estimate = 0.15044

Adjusted R square = 0.995

F value = 347.629

P value = 0.003

The high value of R square and R square adjusted in all the three cases suggest that there is a strong relationship between the

dependent variable, that is, GDP and three predictor variables of primary sector, secondary sector and tertiary sector. Further on comparing the P value at 5 percent significance level it is found that the P value in all cases is less than 0.05 which indicates that there is a significant relationship. And on performing the test of significance for all the sectors individually, it is found that the t value is also significant at 5 percent level of significance (Appendix Tables).

The regression coefficient for the primary sector declined from 0.368 in the first period to 0.348 in the second period and further declined to 0.265 in the last period. This means that the contribution of the primary sector to the overall GDP declined after 1991. The primary sector consists of agriculture, forestry, logging and fishing.

The regression coefficient for the secondary sector increased from 0.279 in the first period to 0.284 in the second period but decreased to 0.249 in the last period. This means the contribution of the secondary sector after 1991 first increased marginally from 0.279 to only 0.284 and then declined. The secondary sector constitutes of manufacturing, construction, mining, quarrying, electricity, gas and water supply.

The regression coefficient for the tertiary sector increased from 0.309 in the first period to 0.480 in the second period and further to 0.551 in the last period, implying that this sector's contribution increased heavily after 1991. This sector includes trade, restaurants, hotels communications transport, financing, insurance, real estate, public administration, defence, and all other services.

From the above analysis it can be safely concluded that the tertiary sector is the main driving force behind the growth of the Indian economy after the reforms and although the share of the primary sector is declining but the growth in the secondary sector is not that impressive particularly in the years after 2000.

(ii) Pattern of Growth in the Primary Sector:

Here we will analyze the breakup in the sectoral growth. If we go by the data of CMIE, the performance of the Indian economy in terms of agriculture and its allied sectors has not been good. In agriculture itself we had a negative growth of -1.13 percent in 1995-96, -2.82 percent in 1997-98, -0.56 percent in 2000-01, -8.11 percent in 2002-03 and also in 2004-05 when the growth rate was -0.19 percent.

Table 8: Percentage change over previous year in Primary sector
(At constant prices in percentage)

Year	Agriculture	Forestry & Logging	Fishing
1990-91	4.28	-1.33	4.84
1991-92	-2.31	0.78	3.6
1992-93	7.06	-2.34	8.54
1993-94	3.18	-0.48	11.22
1994-95	4.74	2.66	6.35
1995-96	-0.98	-0.38	5.16
1996-97	10.4	1.51	8.12
1997-98	-2.97	2.45	1.72
1998-99	7.12	1.18	-5
1999-00	2.41	4.41	6.98
2000-01	-0.56	2.7	4.69
2001-02	6.48	3.07	4.95
2002-03	-8.11	0.66	4.14
2003-04	10.89	-1.14	3.57
2004-05	-0.19	1.57	1.53
2005-06	6.31	1.63	4.06

Source: CMIE, National Income Statistics, September, 2007.

Moreover the variation in percentage growth is also very high with a range from 10.89 to -8.11. In forestry and logging also India had four years with negative growth. Towards the latter half of nineties there was a somewhat stable growth but it again turned negative in 2003-04. Comparatively in the fishing sector there was only one year with negative growth but the range of variation in percentage growth was of the tune of 11.61 to -5.00 percent, which is significantly high.

If we go the production of food grains, although the production has increased through the entire period of eighties and nineties but rate of increase was different. Between 1980-81 and 1990-91 the food grain production increased by 38.8 points while between 1990-91 and 1999-00 it increased by only 23.3 points. In case of the production of non-food grains, the production increased by 59.2 points from 1980-81 and 1990-91 while the increase from 1990-91 and 1999-00 was only of 32.7 points.

Table 9: Agricultural production

(Base: Triennium ending 1981-82 =1000)

	1980-81	1990-91	1999-00	2005-06
Foodgrains	104.9	143.7	169.7	168.6
(a) Cereals	105.5	144.2	175.1	174.4
<i>Rice</i>	107.8	149.4	180.3	183.1
<i>Wheat</i>	103.2	156.6	221.7	197.4
<i>Coarse Cereals</i>	99.8	113.1	104.8	119.8
(b) Pulses	104.1	140.5	132.1	128.6
<i>Gram</i>	105.4	130.2	124.4	137.3
Non-Foodgrains	97.1	156.3	189	224.4
(a) Oilseeds	95.1	179.5	193	254.2
<i>Groundnut</i>	83.1	125.3	87.7	131.2
<i>Rapeseed&Mustard</i>	113	256.3	283.7	386.5
(b) Fibres	94.2	128.2	149.5	241.6

<i>Cotton</i>	93.2	130.9	153.3	260.2
<i>Jute</i>	100.8	122.6	145.9	153
<i>Mesta</i>	96.7	76.7	66.1	50.4
(c)Plantation crops	76	144.9	205.3	208.9
<i>Tea</i>	101.6	132.3	149	151.1
<i>Coffee</i>	85.1	121.7	209.3	216.3
<i>Rubber</i>	101.1	217.2	410.8	416.8
(d)Others				
<i>Sugarcane</i>	98.8	154.3	191.6	178.2
<i>Tobacco</i>	100.2	115.8	109.1	114.4
<i>Potato</i>	103.9	163.3	265.4	253.8
All Commodities	102.1	148.4	176.9	189.3

Source: Calculated & Computed from Economic Survey, 2006-07, Directorate of Economics & Statistics, Department of Agriculture &Cooperation, Appendix Tables S-13.

(iii) Pattern of Growth in the Secondary Sector:

The overall growth rate of the industry, as is evident from Table-10, increased from 0.26 percent in 1991-92 to 11.58 percent in 1995-96, after which it declined to 6.68 percent the very next year and further to 3.71 percent in 1997-98. If the year 2001-02 is omitted, the growth after 1997-98 has been steady and it again reached double digit figures of 10.92 percent in 2006-07. The latest growth figures of 2006-07 are still lower than that of 1995-96. In mining and quarrying it was a highly fluctuating growth with no definite pattern, ranging from 0.92 percent to 10.46 percent. In manufacturing the growth rate increased from -2.40 percent in 1991-92 to 15.46 percent in 1995-96, only to fall to 9.50 percent the next year and further to 0.05 percent in 1997-98. The growth rates again increased to 7.75 in percent in 2000-01 followed by a fall to 2.54 percent the next year. After this fall the growth rates increased constantly to 12.32 percent in 2006-07. In electricity, gas and water supply the percentage growth was more or

less constant. Barring the years of 2000-02 the growth rates never fell below 4.00 percent. In 2006-07 it stood at 7.44 percent. In the construction sector, if the year of 1996-97 is ignored where the growth rate was only 1.87 percent, the growth rates increased from 0.57 percent in 1993-94 to 10.47 percent in 1997-98 and then it declined to 4.00 percent in 2001-02 after which it improved to 14.43 percent in 2005-06. But in the year 2006-07 it declined to 10.71 percent. An overall trend that emerges is that the growth rates on an average recovered and peaked in the mid nineties after then it declined, which was followed by a recovery in the late nineties.

Table 10: Sector Wise Growth in Industry

(At constant prices in percentage)

Year	Industry	Mining & Quarrying	Manufacturing	Electricity, Gas & Water Supply	Construction
1990-91	7.09	10.46	4.77	6.69	11.79
1991-92	0.26	3.36	-2.40	9.69	2.06
1992-93	3.31	0.92	3.09	6.94	3.48
1993-94	5.81	1.39	8.59	7.50	0.57
1994-95	9.28	9.29	10.82	9.37	5.38
1995-96	11.58	5.87	15.46	6.80	5.98
1996-97	6.68	0.55	9.50	5.44	1.87
1997-98	3.71	9.81	0.05	7.72	10.47
1998-99	4.14	2.83	3.13	7.03	6.27
1999-00	4.57	3.19	3.22	5.54	8.39
2000-01	6.35	2.39	7.75	2.05	6.23
2001-02	2.72	1.75	2.54	1.74	4.00
2002-03	7.06	8.85	6.81	4.75	7.95
2003-04	7.38	3.09	6.63	4.77	11.98
2004-05	9.75	7.45	8.65	7.48	14.10
2005-06	9.58	3.59	9.09	5.26	14.43
2006-07	10.92	5.14	12.32	7.44	10.71

Source: CMIE, National Income Statistics, September, 2007.

In order to analyze the Industrial growth with respect to Index of Industrial Production (IIP) one has to be careful about the base year.

The data for the period 1992-93 to 1994-95 corresponds to the 1980-81 base year while the latter figures conform to 1993-94 base year. Between the periods 1995-96 to 2004-05 the overall Index for Industrial Production first declined from 13 percent in 1995-96 to 6.1 percent to in the next year. Again it rose to 6.7 percent the very next year only to decline again the following year to 5 percent and to 2.7 percent the next year. But afterwards it grew at a positive rate and reached 8.4 percent in 2004-05.

Table 11: Annual Growth Rate based on Index of Industrial Production
(Percentage)

Period	Mining & Quarrying	Manufacturing	Electricity	Overall
Weights	10.47	79.36	10.17	100
1992-93*	0.5	2.2	5	2.3
1993-94*	3.5	6.1	7.4	6
1994-95*	9.8	9.1	8.5	9.1
1995-96	9.7	14.1	8.1	13
1996-97	-1.9	7.3	4	6.1
1997-98	6.9	6.7	6.6	6.7
1998-99	-0.8	4.4	6.5	4.1
1999-00	1	7.1	7.3	6.7
2000-01	2.8	5.3	4	5
2001-02	1.2	2.9	3.1	2.7
2002-03	5.8	6	3.2	5.7
2003-04	5.2	7.4	5.1	7
2004-05	4.4	9.2	5.2	8.4
2004-05#	5.1	9.2	6.4	8.6
2005-06#	0.4	8.9	4.8	7.8

Source: Economic Survey, 2005-2006, Central Statistical Organization, Page no: 132
Economic Survey, 2001-2002, Central Statistical Organization, Page no: 161

Note: Base: 1993-94=100

#: April- December

*: Base: 1980-81=100

(iv) Pattern of Growth in the Tertiary Sector:

As can be seen from the table below the performance of the service sector is quite good. The percentage growth rate increased

from 5.15 percent in 1990-91 to 10.09 percent in 1995-96, then it declined to 7.2 percent in 1996-97 but it soon recovered itself to an 8-9 percent in the following years. This stable and strong growth rate assumes further significance as this particular sector contributed on an average more than 45 percent to GDP. In all the sub sectors of services the growth pattern was almost the same with first increasing till 1995-96 and declining a bit thereafter. But the good news was that it in the latter half of nineties the growth rate had a stable and increasing trend. In Trade the growth rate first increased to 14.01 percent in 1995-96 after which it remained in a range of 5 to 10 percent. In 2005-06 it was 8.06 percent. In the sector of hotels and restaurants the growth rate first increased from 0.78 percent in 1991-92 to 25.44 percent in 1995-96 after which it declined but was able to maintain an average rate of 9 percent. In 2005-06 the growth rate was 9.43 percent. In the sector of transport, storage and communications the growth rate first increased to a two digit figure in 1995-96, after which it declined but by 1999-00 it again regained the two digit figure and was able to maintain it on an average. In 2004-05 the growth rate was as high as 15.17 percent. In finance, insurance, real estate& business service the trend is quite different. The growth rate first declined from 10.82 percent in 1991-92 to 5.45 percent in 1992-93 and then increased to 11.17 percent the very next year only to again decline to 3.89 percent the very next year but after that it more or less remained stable and in 2005-06 it stood at 10.94 percent. In the sector of community services and personal services the growth rates

reached their maximum in 1999-00 but which it declined but it is again growing steadily. In 2005-06 the growth rate was more than 7 percent. In the sector of administration and defence the growth in the late nineties reached a two digit figure but after that the growth rate was less than 3 percent. There was some recovery in 2004-05 when it increased to 8.96 percent but the following year it again decreased to 5.37 percent.

Table 12: Percentage Change over Previous Year in Tertiary Sector
(At constant prices in percentage)

1	2	3	4	5	6	7	8
1990-91	5.15	5.05	7.62	4.97	6.21	4.36	1.30
1991-92	4.62	0.55	0.78	6.44	10.82	2.59	2.11
1992-93	5.67	5.99	6.43	4.78	5.45	5.99	4.96
1993-94	7.25	6.92	8.30	6.70	11.17	4.47	2.56
1994-95	5.90	10.85	4.05	9.03	3.89	2.26	1.29
1995-96	10.09	14.01	25.44	10.16	8.09	7.35	6.75
1996-97	7.57	7.73	12.83	7.97	6.19	8.05	4.09
1997-98	8.83	7.63	8.06	7.23	11.71	8.30	14.48
1998-99	8.29	7.20	13.97	7.45	7.80	9.72	10.62
1999-00	9.46	7.02	9.72	10.17	9.19	11.54	13.28
2000-01	5.68	5.01	6.99	11.22	4.08	4.78	2.08
2001-02	7.15	9.81	7.86	8.21	7.28	4.11	2.92
2002-03	7.38	6.99	5.71	13.55	7.98	3.93	1.60
2003-04	8.51	10.45	8.46	15.15	5.58	5.41	2.59
2004-05	9.55	8.33	8.68	15.17	8.70	7.94	8.96
2005-06	9.83	8.06	9.43	13.90	10.94	7.72	5.37

Source: CMIE, National Income Statistics, September, 2007.

Note: 1. Year

2. Service

3. Trade

4. Hotels & Restaurants

5. Transport, Storage & Communications

6. Financing, Insurance, Real Estate & Business Services

7. Community Services & Personal Services

8. Public Administration & Defence

On an average some general trends could be some like sectors like trade, hotels and restaurants reached their peak growth rates in

the mid nineties after which it decline whereas other sectors like real estate, business services, community and personal services, public administration and defence reached their peak growth rates in the latter half of nineties after which they declined. It was only in transport, storage and communications that the growth rates after 2000 were higher than the highest growth rate of nineties.

3 (V) REFORMS AND INTER STATE GROWTH DISPARITIES:

Till now it is evident that particularly after the reforms the Indian economy has moved to a higher growth trajectory but there is a strong view point that the growth has been uneven. In order to study the growth rates of individual states and union territories the per capita net state domestic product can be used. In Table-13 the states have been arranged in decreasing order in terms of their increase in per capita net state domestic product between 1980-81 to 1990-91 and 1990-91 to 2004-05.

The highest increase in per capita net state domestic product occurred in Pondicherry among union territories and in Goa among states and the lowest increase was in Assam. An interesting feature that arises is that states like Madhya Pradesh, Bihar and Uttar Pradesh are among the top performers. A possible explanation for this could be that these states were recently broken up in 2000 and the figures here in the table pertains to the combined figures as Madhya Pradesh includes the states of Madhya Pradesh and Chattisgarh, Bihar includes the states of Bihar and Jharkhand and Uttar Pradesh consists of the states of Uttar Pradesh and Uttrakhand.

Table 13: Per Capita Net State Domestic Product

(Rupees at current prices)

(1) State / UT	(2) 1980-81	(3) 1990-91	(4) 2004-05	5	6	7
Pondicherry	3201	7657	56034	4456	48377	43921
Goa	3200	8952	58184	5752	49232	43480
Madhya Pradesh	1609	4798	50993	3189	46195	43006
Delhi	4145	11373	53976	7228	42603	35375
Bihar	1022	2966	33357	1944	30391	28447
Haryana	2437	7721	32712	5284	24991	19707
Uttar Pradesh	1402	3937	25965	2535	22028	19493
Maharashtra	2492	7612	32170	5120	24558	19438
Himachal Pradesh	1820	5243	27486	3423	22243	18820
Kerala	1835	5110	27048	3275	21938	18663
Gujarat	2089	6343	28355	4254	22012	17758
Punjab	2629	8177	30701	5548	22524	16976
Tamil Nadu	1666	5541	25965	3875	20424	16549
Karnataka	1644	4975	23945	3331	18970	15639
Sikkim	1545	5213	24115	3668	18902	15234
Andhra Pradesh	1467	4816	23153	3349	18337	14988
West Bengal	1925	5072	22497	3147	17425	14278
Meghalaya	1528	4944	19577	3416	14633	11217
Arunachal Pradesh	1522	5231	19724	3709	14493	10784
Jammu & Kashmir	2152	4624	16190	2472	11566	9094
Orissa	1352	3166	13601	1814	10435	8621
Manipur	1396	3912	14901	2516	10989	8473
Rajasthan	1424	4883	16212	3459	11329	7870
Assam	1329	4432	13633	3103	9201	6098

Source: Central statistical Organisation based on Directorate of Economics & Statistics of respective State Governments (as on 21-11-2005)

Note: Estimates based on 1993-94 series

P: Provisional estimates

1. State/UT

2. 1980-81

3. 1990-91

4. 2004-05 (P), Estimates is Provisional Estimates

5. Increase between 1980-81 & 1990-91

6. Increase between 1990-91 & 2004-05

7. Interstate differences in growth

Another way of looking at the interstate disparities in growth performances could be by looking at the percentage share of states in the aggregate net state domestic product.

Table 14: Ranking of States as per their Share in Aggregate Net State Domestic Product

(Percentage)

State/UT	(i) 1980-81	Rank of (i)	(ii) 1990-91	Rank of (ii)	(iii) 1999-00	Rank of (iii)
Andhra Pradesh	6.74	6	7.44	4.5	7.78	5
Arunachal Pradesh	0.08	25	0.1	25	0.11	24
Assam	2.06	16	2.3	16	1.76	16
Bihar	6.04	8	5.87	8	4.42	10
Delhi	2.22	15	2.51	14	3.45	13
Goa	0.29	20	0.26	20	NA	NA
Gujrat	6.15	7	6.15	7	6.29	6
Haryana	2.72	14	2.98	13	2.93	14
Himachal Pradesh	0.7	18	0.66	18	0.7	18
Jammu & Kashmir	1.14	17	0.85	17	0.86	17
Karnataka	5.29	9	5.27	9	5.96	8
Kerela	4.03	11	3.47	12	4.13	11
Madhya Pradesh	7.26	4	7.44	4.5	6.08	7
Maharashtra	13.45	2	13.96	1	14.95	1
Manipur	0.17	22.5	0.17	22	0.18	23
Meghalaya	0.18	21	0.21	21	0.2	22
Mizoram	0.06	27	0.08	26	NA	NA
Nagaland	0.11	24	0.16	23	NA	NA
Orissa	3.07	13	2.33	15	2.3	15
Punjab	3.8	12	3.87	11	3.86	12
Rajasthan	4.21	10	5.05	10	4.69	9
Sikkim	0.04	28	0.05	28	0.05	25
Tamil Nadu	7.02	5	7.29	6	8.3	4
Tripura	0.3	19	0.28	19	0.27	20
Uttar Pradesh	13.56	1	12.97	2	11.59	2
West Bengal	9.08	3	8.07	3	8.62	3
A & N Islands	0.07	26	0.06	27	NA	NA
Chandigarh	NA	NA	NA	NA	0.29	19
Pondicherry	0.17	22.5	0.14	24	0.21	21

Source: The Economic Times, 19 June, 2002.

Note: NA stands for not accounted

In Table-14 the states have been ranked in terms of their share in aggregate net state domestic product. Here the figures up till 1999-2000 have been taken in order to do a comparison between a ten year period before the reforms and a ten year period after the reforms. The states when ranked in terms of percentage share of states in

aggregate net state domestic product don't show much a variation in terms of their rank in 1980-81 and 1990-91. But after reforms when we compare the 1990-91 with 1999-2000 we can see that there are significant variations. States could be divided into three categories, one which had performed well measured by their improvements in ranks, second category consists of those states which maintained their ranks and the third category is of those states which featured a decline in their ranks in 1999-2000 from their previous one in 1990-91. In the first category of states which showed improvement in their ranks are Arunachal Pradesh, Delhi, Gujrat, Karnataka, Kerela, Manipur, Rajathan, Sikkim and Pondicherry. In the second category of states who maintained their ranks Andhra Pradesh, Assam, Himachal Pradesh, Jammu Kashmir, Meghalaya, Orissa, Uttar Pradesh and West Bengal. And in the third and last category of states are those states which experienced a worsening of their ranks, namely Bihar, Haryana, Madhya Pradesh, Manipur, Punjab and Tripura. Take the case of Bihar. In the early nineties, it had the eight highest state domestic products in the country. In 1999-00, after a decade of economic reforms, it has gone two ranks and was placed at the tenth position after losing considerably in terms of share in aggregate state domestic production (SDP) of the major states. Bihar's share in aggregate SDP declined from 5.87 percent in 1990-91 to 4.42 percent in 1999-00.

Towards the end, a question arises as to whether the economic reforms of the 1990s actually spur economic growth? The advocates

of the reform process put forward the argument that whatever else may be the effects of the reform, it is beyond doubt that it has helped the Indian economy move to a higher rate of growth. But a counter argument arises that the path to a higher economic growth trajectory occurred well before the reform of the 1990s. In fact the 1980s were also a period when the rate of growth of GDP was close to 6% overall, with an acceleration in the second half of the decade. This transition to a high rate of growth occurred during the 1980s, when liberalization was limited and not from the 1990s, when the pace of liberalization was substantially accelerated and was far more widespread. But we shouldn't forget that main factor behind the accelerated growth of the 1980s was the fiscal stimulus, provided by the state, financed by growing internal and external public borrowing. Such an expansion along with other factors like government regulated economy proved to be unsustainable and ended up in the crisis of 1990-91.

All the national income related growth indicators indicate that the Indian economy is growing constantly and in the recent decade the volatility in the growth rates have also declined. If we look at the sector wise growth rates it is highest in the service sector followed by the industrial sector which is followed by the agricultural sector. The good news is that the service sector is not only growing strongly but is also increasing its contribution to GDP. But the good news ends when we see the growth pattern in agriculture has worsened in general and also when we compare with the pre-reform period particularly the

eighties. Similar is the case with industries where also the performance has stagnated in general during nineties. But we shouldn't forget that main factor behind the accelerated growth of the 1980s was the fiscal stimulus, provided by the state, financed by growing internal and external public borrowing. Such an expansion proved to be unsustainable and along with many other factors ended up in the crisis of 1990-91.

Again when we see the sectoral contributions to growth we see that definitely there is a gradual decline in the primary sector contribution and an increase in the secondary and tertiary sector's contribution. There are two cautions here: first, the relative contribution of secondary is much smaller than that of tertiary sector and the matter of concern is that too much dependence on tertiary sector alone is not a very positive development. For a strong economy it is fundamental that the secondary sector must have a sustained robust growth. Secondly, when we study the agriculture sector we can visualize that it is not such that the contribution of agriculture is decreasing because the contribution of industries and services is increasing rather it is due bad performance of agriculture itself. The performance of the economy in terms of increasing saving rates, expanding export-import ratio and bulging foreign exchange reserves is again an encouraging sign. But when we analyze inter state performances during the reform period we see that we have an unequal growth pattern where some states are performing well while others are not. The distributional aspects of growth are going showing

loop sided growth as is evident from the income distribution where a small section of the society is expropriating a major chunk of the benefits of growth as is evident from the expenditure pattern of the society.

These rates of growth call into question the arguments advanced by the advocates of neo liberal reform that there is a direct link between such reform and economic growth. Such a link was based on the premises that both deregulation and external liberalization spur private investment, that curbing public investment in beneficial for aggregate growth because otherwise it tends to crowd out private investment and the private agents acting on this own will deliver both more efficient and more dynamic outcome. This optimistic perception ignores the widespread evidence of market feeling at both microeconomic and macroeconomic levels, as well as the strong evidence of close positive links between public and private investments. There are obvious reasons as to why such an argument wouldn't hold true in a developing economy like India. Reason being the unequal asset and income distribution and the consequent limited nature of the home market due to which private investment would come up against a demand constraint fairly rapidly. This would be aggravated when the type of private investment that occurs does not generate that much employment, as is likely when the investment is in sectors catering to richer consumers with production involving high import content or more capital intensive technology. Public investment in countries like India tends to have strong positive linkages with

private investment, not only because of the standard Keynesian mechanism, but because it also operates to ease infrastructure and other supply constraints making private production easier and cheaper. Therefore, a strategy based on reducing public investment and hoping for deregulated private investment to fill the gap could well be expected to generate lower aggregate investment and growth trajectories than one which allows for an important role for public investment.

It can be conveniently argued that separating 'Markets' and 'State' is no shortcut to growth. We had seen how growth performed itself in the days when the State controlled the Markets. But when we separated Markets from State things didn't change like a fairy tale. So, a rational approach to a higher growth trajectory would contain the participation of both Markets and State, as these two are complements of each other, not substitutes.

CHAPTER-IV

PATTERN OF GROWTH AND ITS IMPACT ON POVERTY

PATTERN OF GROWTH AND ITS IMPACT ON POVERTY

Since July, 1991 the Indian economy has witnessed a series of reforms, encompassing all major sectors of the economy which marks a steady break from the past policy regime. The public sector oriented import-substituting development strategy, hitherto nurtured by the Indian planning regime since 1951, was given up in favour of an open for all, privatized, liberalized and globalized economy with a export-linked growth strategy as a result of which India could no more keep aloof from the rest of the world, particularly if technological advances occurring elsewhere were to be assimilated and adapted to India's own production requirements. With the coming of the age of privatization, liberalization and globalization the age old economic philosophies have been replaced by the new one. Since the introduction of the reform process India has also introduced the process of stabilization and structural adjustment. Now the effects of the reform process on the social sector particularly poverty and unemployment is a matter of great debate. This study tries to see the effect of reform process on unemployment scenario and the presumed positive association between economic growth and poverty reduction.

4 (I) POVERTY:

Poverty is a social evil. It is more than hunger and starvation. It also has a relative dimension. A person is relatively poor if he or she cannot appear in public without feeling shame or if he or she cannot take part in the social life of a community. Poverty can be defined as a socio-economic aspect, which makes poverty relative (Adam Smith, 1979)¹. It is a phenomenon in which a section of the society is unable to fulfill even its basic necessities of life. Poverty is a state of deprivation. In absolute terms, it reflects the inability of an individual to satisfy certain basic minimum needs for a sustained healthy and a reasonably productive living. The proportion of population not able to attain the specified level of expenditure is then segregated as poor. The word poverty can be used synonymously hunger, lack of shelter, being sick and not knowing how to read. According to Sen² (1997) poverty is not only lack of purchasing power which makes a person incapable to meet the basic minimum needs of life like food and housing as he sees poverty in the perspective of what social choices an individual can make and these social choices are based upon the actual achievement and the freedom to achieve what we value. And what an individual manages to do or to be is his functioning. That is, the quality of life depends not only on his achievement but also on the freedom he has while choosing from the various options available to him.

In the 1990s, India's GDP grew rapidly, and this growth has been have associated this acceleration with the process of economic reform that began in the 1990s. Yet the reforms themselves, and the limited opening of the Indian economy that they involved, remain controversial, as does their effect on poverty.

There are two aspects of measuring poverty. The first is absolute poverty. It is also referred to as the headcount measure. It measures how many persons are below the poverty line, that is, the number of persons living below a specified minimum level of income or expenditure. Andreß³ (1998) is of the view that, "Absolute poverty is related to the physical existence of a person, there is a clear breakpoint when poverty starts and poverty is regarded to be constant".³ Rowntree⁴ (1941) has earlier categorized this as primary poverty. Rauhut (2005) says that absolute Poverty is the notion of poverty as a state of absolute deprivation where the basic means of bio physical survival cannot be accessed".⁵ There are some difficulties associated with this definition of poverty like there are differences in the subsistence level depending on the items that a person considers essential and their respective prices, the calories requirement for different people is different, needs vary according to the geographical and social conditions. The other type is relative poverty. Here we take into account income distribution, that is we take the percentage of population and percentages of GDP and through percentiles we study the relative income shares of various percentiles group within a given

population. In this method an individual's situation is compared to a predefined average which is a generally accepted standard of living. Rowntree⁶ (1941) has categorized this as secondary poverty. Rauhut⁷ (2005) is of the view that relative poverty is intrinsically tied to inequality - as soon as average levels of economic resources available are sufficient to transcend absolute poverty under uniform distribution, then inequality will lead to relative poverty". In view of this approach Runciman had said that, "The relative deprivation approach, where an individual compares his situation with a subjectively chosen reference group. Poverty depends on if he feels inferior to his subjectively chosen reference group or not"⁸. Yitzhaki (1982) has described relative deprivation as "forgone utility due to the lack of commodities".⁹ Relative deprivation is not poverty in itself. Townsend¹⁰ (1979) pointed out that only if the necessary resources to obtain these conditions lacked and if they, for that reason were unable to fulfill their role as members in that society they could be considered poor. One important aspect of Relative poverty is social exclusion. In this view Walker (1995) considers poverty "as a status hierarchy or as a number of collectivities, bound together by sets of mutual rights and obligations that are rooted in a broader moral order".¹¹ That is, low income and low consumption finally leads to social exclusion. According to him social exclusion can be seen as the destination of the cumulative effects of poverty, denying the individual participation and membership of moral, social and economical and

political community. Amartya Sen¹² (1982) is of the view that poverty depends on both the absolute component and the social functions, which in other words mean that poverty has both absolute and relative constituents. Despite the strength in the argument favoring relative poverty over absolute poverty, poverty in India is measured in terms of absolute poverty, the simple reason being the simplicity in measuring it. There are basically two methods of calculation of poverty. One is income method. It takes into account per capita income and the minimum income which satisfies the minimum nutritional requirements. The other is expenditure method which takes into account expenditure and per capita consumption expenditure. In case of poor persons income is equal to expenditure as they cannot save. But we prefer expenditure as it is a direct method. Even poor persons do some expenditure by borrowing/dis-saving which is accounted for in expenditure method. The poverty estimates are based on the results of Household Consumer Expenditure Surveys by the National Sample Survey Organization (NSSO). These surveys are in the field every year nowadays but this study concentrates particularly on the quinquennial rounds which are large surveys and take place every five years.

4 (II) THE INDIAN POVERTY MONITORING SYSTEM:

The Government of India's official poverty estimates are based on the results of regular consumer expenditure surveys by the National Sample Survey Organization (NSSO). Surveys are in the field

continuously and, in recent years; all surveys have collected some data on consumers' expenditure. But only the larger surveys that focus on consumers' expenditures are used by the Planning Commission to calculate the official poverty statistics. In principle, these large surveys take place every five years. Such surveys were conducted in 1983 (the 38th Round of the NSS), 1987–88 (the 43rd Round), 1993–94 (the 50th Round), in 1999–2000 (the 55th Round) and most recently, in 2004–2005 (60th Round). For each of these years, the Planning Commission has published estimates of the proportion and number of people in poverty, broken down by state and sector. The poverty estimates published by the Planning Commission count the number of people who are living in households whose monthly per capita total expenditure is less than a poverty line for the sector and state in which they live. These poverty lines are updated over time using the Indian system of state by state price indexes, which is estimated separately for rural from the consumer price index for agricultural laborers (CPIAL) and for the urban by consumer price index for industrial workers (CPIIW) households. There is no predetermined All-India poverty line, either for urban or rural. Instead, poverty counts are made for each state, within each sector, and added up to get urban and rural totals. All-India urban and rural poverty lines are then set to guarantee that, if applied to all urban or rural households without differentiation by state, the total number of those in urban and rural poverty matches the sum of the state counts.

The original official state-level poverty lines, which incorporate state to state differences in price levels, come from the report of an Expert Group, Government of India (1993), which also recommended a number of other changes in previous practice. The poverty ratio at all-India level is obtained as the weighted average of the state-wise poverty ratio. The poverty data from 1983 onwards are available according to current procedures.

4 (III) THE POVERTY LINE:

In India the question of defining poverty line was first raised by Indian Labor Conference in 1957. Based on this a working Group was set up in 1962 by Planning Commission to deliberate on the question of what should be regarded as the nationally desirable minimum level of consumer expenditure. Based on the recommendation of Nutritional Advisory Committee a minimum consumption expenditure of Rs.100 at 1960-61 prices of a family of 5 persons will be needed to meet nutritional diet. This consumption expenditure depends upon prevailing prices and these prices vary in rural and urban areas. It was also felt that depending upon the nature of work the requirement of calorie also changes. Apart from the need for calorie it was also felt that the prices prevailing in urban areas are higher than the rural areas. The cost of living in urban areas has implication on the consumption of a person or a household therefore the consumption expenditure per capita income was suggested to be Rs.25 for urban areas at 1960-61 prices and the

expenditure consumption per capita income rural areas was raised Rs.18.9, based on the recommendation of Indian Council of Medical Research the calorie intake for determining poverty line was fixed at 2100 calories for urban areas and 2400 calories for rural areas. In 1979 a Task Force was appointed by Planning Commission. The poverty line was converted into consumption expenditure from calorie criteria that would ensure calorie intake. This consumption expenditure has been revised from time to time.

(i) Task Force Method:

The Planning Commission, in 1977, constituted a Task Force on Projections of Minimum Needs and Effective Consumption Demand, which submitted its report in 1979. The Task Force (1979) defined the poverty line as per capita consumption expenditure level, which meets the average per-capita daily calorie requirement of 2400 kcal in rural areas and 2100 kcal in urban areas along with a minimum of non-food expenditure. The Task Force used the age-sex-activity specific calorie allowances recommended by the Nutrition Expert Group (1968) to estimate the average daily per capita requirement for rural and urban areas using the age-sex-occupational structure of their respective population (as projected for 1982-83). Thus, to the extent the data permitted, the age, sex and occupational differentials in the daily calorie requirement of the population were captured in the average norms.

The Task Force used the 28th Round (1973-74) NSS data relating to household consumption both in quantitative and value terms in order to compute the monetary equivalent of these calorie norms, which is known as the poverty line. Based on the observed consumer behavior in 1973-74 it was estimated that, on an average, consumer expenditure of Rs.49.09 per capita per month meets the calorie requirement of 2400kcal per capita per day in rural areas and Rs.56.64 per capita per month with an intake of 2100 kcal per capita per day in urban areas.

For the estimation of persons below poverty lines, the percentage distribution of persons in different expenditure classes obtained from the National Sample Survey (NSS) data on household consumer expenditure was utilized. The NSS distribution of private consumption was adjusted pro-rata to correspond to the consumption estimates of National Accounts made by the Central Statistical Organization (CSO). Using the poverty line and the state-wise adjusted distribution of persons by expenditure classes for the reference year, the percentage of persons below the poverty line were estimated. Applying the projected population of the year, the number of persons in poverty was estimated from the percentage of persons. The same poverty line defined at national level (separately for rural and urban areas) was used in all the States/UTs. The poverty line defined by the Task Force at 1973-74 prices was being updated for the reference year using the implicit CSO private consumption deflator. CSO in their national accounts publish the

estimates of expenditure at current and constant prices. The ratio between the two yields the implicit consumption deflator.

The Task Force methodology for estimating poverty at national and state level was regarded by some as inappropriate and even inadequate in giving a representative picture of the incidence of poverty in India. The main points of the criticism were the adjustment procedure for calculating the poverty ratios, the deflators to measure the price changes in the poverty line, using the same poverty line for all the states leading to the absence of price differentials across the states, and keeping of a fixed consumption basket over time along with a same and uniform consumption basket for all the states.

(ii) Expert Group Method:

The Planning Commission in September 1989, constituted the Expert Group on Estimation of Proportion and Number of Poor to look into the methodology for estimation of poverty and to re-define the poverty line, if necessary. The Expert Group submitted its Report in July, 1993. The Expert Group did not redefine the poverty line and adopted the one defined by the Task force, which was at national level in rural and urban areas. The Expert Group estimated separate poverty lines for each state by disaggregating the national level poverty line,

The important points of departure between the Expert Group and the Task Force methodology are: (i) The Task force methodology has a unique process of adjustment. In 1979 it was around ten percent. In

1993-94, it has gone up to about 40 per cent. Such adjustment distorted the data. This process was done away with in the Expert Group methodology.

(ii) In the Expert Group methodology state-specific poverty lines as against a national poverty line for rural and urban areas.

(iii) The Expert Group uses state-specific cost of living indices for estimating and up-dating the poverty line separately for rural and urban areas. The Task Force estimates were based on a uniform national index which was same for all the states and also for rural and urban areas. The Expert Group methodology uses state-wise Consumer Price Index of Agricultural Labourers (CPIAL) for estimating and updating the rural poverty line and Consumer Price Index of Industrial Workers (CPIIW) for estimating and updating urban poverty line.

In March, 1997, the Planning Commission accepted the Expert Group methodology for poverty estimation as the basis for computing the official estimates of poverty in India. The estimates for the past years were re-computed accordingly. These are given below.

Table 1: Poverty Estimates in India

(Expert Group Methodology)

Year	No of poor (millions)			(%) of poor		
	Rural	Urban	Combined	Rural	Urban	Combined
1973-74	261.3	60	321.3	56.4	49	54.9
1977-78	264.3	64.6	328.9	53.1	45.2	51.36
1983	252	70.9	322.9	45.7	40.8	44.5
1987-88	231.9	75.2	307.1	39.1	38.2	38.9
1993-94	244	76.3	320.3	37.3	32.4	36

Source: Report of the Expert Group on Estimation of Proportion and Number of Poor, Perspective Planning Division, Planning Commission, New Delhi, July 1993.

As is evident from Table-1 the poverty ratio for India as a whole declined from 54.9 percent in 1973-74 to 36 percent in 1993-94, that is a decline of 18.9 percent in a span of about 20 years and the most significant decline was between 1977-78 and 1983 of 6.86 percent. In this period of twenty years urban poverty declined by 16.6 percent and rural poverty declined by 19.1 percent. But if the reduction in the absolute numbers of poor is seen the picture is not that encouraging and the total numbers of poor decline from 321.3 millions to only 320.3 millions.

Table 2: Rural Poverty Lines

(Rs. monthly per capita)

State/UT	1973-74	1977-78	1983-84	1987-88	1993-94	1999-00	2004-05
Andhra Pradesh	41.71	50.88	72.66	91.94	163.02	262.94	292.5
Assam	49.82	60.29	98.32	127.44	232.05	365.43	378.64
Bihar	57.68	58.93	97.48	120.36	212.16	333.07	354.36
Goa	50.47	58.07	88.24	115.61	194.94	*	362.25
Gujarat	47.1	54.7	83.29	115	202.11	318.94	353.93
Haryana	49.95	59.37	88.57	122.90	233.79	362.81	414.76
Himachal Pradesh	49.95	59.37	88.57	122.9	233.79	367.45	394.28
Jammu & Kashmir	46.59	61.53	91.75	124.33	*	*	391.26
Karnataka	47.24	51.95	83.31	104.46	186.63	309.59	324.17
Kerala	51.68	58.88	99.35	130.61	243.84	374.79	430.12
Madhya Pradesh	50.2	56.26	83.59	107	193.1	311.34	327.78
Maharashtra	50.47	58.07	88.24	115.61	194.94	318.63	362.25
Orissa	46.87	58.89	106.28	121.42	194.03	323.92	325.79
Punjab	49.95	59.37	88.57	122.9	233.79	362.68	410.38
Rajasthan	50.96	57.54	80.24	117.52	215.89	344.03	374.57
Tamil Nadu	45.09	56.62	96.15	118.23	196.53	307.64	351.86
Uttar Pradesh	48.92	54.21	83.85	114.57	213.01	336.88	365.84
West Bengal	54.49	63.34	105.55	129.21	220.74	350.17	382.82
D & Nagar Haveli	50.47	58.07	88.24	115.61	194.94	*	362.25
Delhi	49.95	59.37	88.57	122.9	233.79	362.68	410.38
India	49.63	56.84	89.5	115.2	205.84	327.56	356.3

Source: (i) Report of the Expert Group on Estimation of Proportion and Number of Poor, Perspective Planning Division, Planning Commission, New Delhi, July 1993.

(ii) Poverty Estimates For 2004-05, PIB, Government of India, New Delhi, March, 2007.

Note: (i) Poverty Ratio of Assam is used for Sikkim, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland and Tripura

(ii) Poverty Ratio of Tamil Nadu is used for Pondicherry and A & N Island.

(iii) Poverty Ratio of Kerala is used for Lakshadweep.

(iv) Poverty Ratio of Goa is used for Daman & Diu.

(v) Urban Poverty Ratio of Punjab used for both rural and urban poverty of Chandigarh.

(vi) In 1993-94, poverty Ratio of Himachal Pradesh is used for Jammu & Kashmir.

Table 3: Urban Poverty Lines

(Rs. monthly per capita)							
State/UT	1973-74	1977-78	1983-84	1987-88	1993-94	1999-00	2004-05
Andhra Pradesh	53.96	69.05	106.43	151.88	278.14	457.4	542.89
Assam	50.26	61.38	97.51	126.6	212.42	343.99	378.84
Bihar	61.27	67.27	111.8	150.25	238.49	379.78	435
Goa	59.48	73.99	126.47	189.17	328.56	*	665.9
Gujarat	62.17	72.39	123.22	173.18	297.22	474.41	541.16
Haryana	52.42	66.94	103.48	143.22	258.23	420.2	504.49
Himachal Pradesh	51.93	66.32	102.26	144.1	253.61	420.2	504.49
Jammu & Kashmir	37.17	55.41	99.62	148.38	*	*	553.77
Karnataka	58.22	68.85	120.19	171.18	302.89	511.44	599.66
Kerala	62.78	67.05	122.64	163.29	280.54	477.06	559.39
Madhya Pradesh	63.02	74.4	122.82	178.35	317.16	481.65	570.15
Maharashtra	59.48	73.99	126.47	189.17	328.56	539.71	665.9
Orissa	59.34	72.41	124.81	165.4	298.22	473.12	528.49
Punjab	51.93	65.7	101.03	144.98	253.61	388.15	466.16
Rajasthan	59.99	72.00	113.55	165.38	280.85	465.92	559.63
Tamil Nadu	51.54	67.02	120.3	165.82	296.63	475.6	547.42
Uttar Pradesh	57.37	69.66	110.23	154.15	258.65	416.29	483.26
West Bengal	54.81	67.5	105.91	149.96	247.53	409.22	449.32
D& Nagar Haveli	59.48	73.99	126.47	189.17	328.56	*	665.9
Delhi	67.95	80.17	123.29	176.91	309.48	505.45	612.91
India	56.76	70.33	115.65	162.16	281.35	454.11	538.6

Source: (i) Report of the Expert Group on Estimation of Proportion and Number of Poor, Perspective Planning Division, Planning Commission, New Delhi, July 1993.

(ii) Poverty Estimates for 2004-05, Press Information Bureau, Government of India, New Delhi, March, 2007.

Notes: Same as Table 2

For the rural areas the lowest poverty line was of Andhra Pradesh in 1973-73, 1993 and also in 2004-05 and the highest poverty line was of Bihar in 1973-74 and of Kerala in 1993-94 and in 2004-05 (Table-2). For the urban areas it was the lowest of Jammu & Kashmir in 1973, and of Assam in 1993-94 and 2004-05, while the highest poverty line, if we

ignore the Union Territories, was of Madhya Pradesh in 1973-73, Maharashtra and Goa in both 1993-94 and 2004-05 (Table-3). Prior to the recommendations of the Expert Group the urban line was around 15 percent higher than the rural line, the both were held fixed in real terms, with updating on the basis of approximate price indexes such as the Wholesale Price Index or the CSO's private consumption deflator. Later a modified version of the poverty line was recommended by Expert Group in 1993. It retained the original rural and urban lines, but adjusted them for state wise differences in price levels, separately for urban and rural sectors, using estimates of state wise price differences calculated from NSS data on expenditures. Because the state wise adjustment were done separately for urban and rural households, we see an interesting feature like the urban poverty lines are very much higher than the respective rural lines. The urban poverty lines for Maharashtra, Goa and Dadra & Nagar Haveli are Rs303.65 more than the rural poverty lines, while the difference in case of Assam is only Rs0.2. This rural urban difference for India as a whole is Rs182.3.

4 (IV) STATE WISE STUDY OF POVERTY BEFORE REFORMS:

The study of poverty ratios at only the all-India level will not be giving the complete true picture as more poverty for the whole country is as bad as more poverty in some states and lesser poverty in others. And in India as per the general experience a marked variation can be observed between the living standards of different states.

Table 4: Percentage of Population below Poverty Line

(Percentage)

State/UT	1973-74	1977-78	1983	1987-88
Andhra Pradesh	48.86	39.31	28.91	25.86
Arunachal Pradesh	51.93	58.32	40.88	36.22
Assam	51.21	57.15	40.47	36.21
Bihar	61.91	61.55	62.22	52.13
Goa	44.26	37.23	18.9	24.52
Gujarat	48.15	41.23	32.79	31.54
Haryana	35.36	29.55	21.37	16.64
Himachal Pradesh	26.39	32.45	16.4	15.45
Jammu & Kashmir	40.83	38.97	24.24	23.82
Karnataka	54.47	48.78	38.24	37.53
Kerala	59.79	52.22	40.42	31.79
Madhya Pradesh	61.78	61.78	49.78	43.07
Maharashtra	53.24	55.88	43.44	40.41
Manipur	49.96	53.72	37.02	31.35
Meghalaya	50.2	55.19	38.81	33.92
Mizoram	50.32	54.38	36	27.52
Nagaland	50.81	56.04	39.25	34.43
Orissa	66.18	70.07	65.29	55.58
Punjab	28.15	19.27	16.18	13.2
Rajasthan	46.14	37.42	34.46	35.15
Sikkim	50.86	55.89	39.71	36.06
Tamil Nadu	54.94	54.79	51.66	43.39
Tripura	51	56.88	40.03	35.23
Uttar Pradesh	57.07	49.05	47.07	41.46
West Bengal	63.43	60.52	54.85	44.72
Andaman & Nicobar Islands	55.56	55.42	52.13	43.89
Chandigarh	27.96	27.32	23.79	14.67
Dadra & Nagar Haveli	46.55	37.2	15.67	67.11
Delhi	49.61	33.23	26.22	12.41
Lakshadweep	59.68	52.79	42.36	34.95
Pondicherry	53.82	53.25	50.06	41.46
India	54.88	51.32	44.48	38.86

Source: Appendix tables 4,5,6 and 7.

In 1977-78 Orissa, Madhya Pradesh, West Bengal and Bihar had more than 60 percent of their population below poverty line, with the highest poverty of more than 66.18 percent registered in Orissa.

Karnataka, Kerela, Tamil Nadu, Uttar Pradesh, all the north eastern states and most of the Union Territories had more than 50 percent poverty. The state with the lowest poverty was Himachal Pradesh. This pattern more or less repeated itself in 1977-78 also. But the poverty ratio of Orissa increased to 70 percent and the state with the lowest poverty ratio changed to Haryana. The decline in poverty between these two periods was the highest in Delhi followed by Andhra Pradesh, Punjab, Rajasthan, Uttar Pradesh and Goa. Assam, Himachal Pradesh, Maharashtra, Orissa and in all the north eastern states the poverty ratios increased.

In 1983 only Bihar and Orissa were having more than 60 percent poverty ratio. Remarkably all the north eastern states were having poverty ratios lesser than 50 percent and among states only Tamil Nadu and West Bengal were having more than 50 percent poverty ratios (Table-4). Another improvement was that except Bihar all other states had experienced a decline in poverty ratios between 1977-78 and 1983 whereas earlier there were ten states that experienced an increase in poverty between 1973-74 and 1977-78.

In 1987-88 there were no states with more than 60 percent poverty ratios and only two states (Bihar and Orissa) with more than 50 percent poverty ratio. Only Dadra & Nagar Haveli showed an unprecedented poverty ratio of 60 percent which was a clear deviation from previous trend (Table-4). If we ignore the union territory of Dadra & Nagar Haveli

there was only one state, that is, Goa which showed an increase in poverty ratio between 1983 and 1987-88.

4 (V) ECONOMIC REFORMS AND POVERTY:

With the initiation of the reform process in 1991 the emphasis shifted towards the non-government sector governed by the market forces. Whether this shift has any impact, particularly negative, on poverty becomes an important question.

Table 5: Pre Reform and Post Reform Poverty Ratios

Year	(% of poor			No of poor (millions)		
	Rural	Urban	India	Rural	Urban	India
Pre Reform Period						
1973-74	56.4	49	54.9	261.3	60	321.3
1977-78	53.1	45.2	51.36	264.3	64.6	328.9
1983	45.7	40.8	44.5	252	70.9	322.9
1987-88	39.1	38.2	38.9	231.9	75.2	307.1
Post Reform Period						
1993-94						
30 Day Recall (URP)	37.3	32.4	36	244	76.3	320.3
1999-2000 Survey						
30 Day Recall	27.09	23.62	26.1	193.24	67.00	260.25
7 Day Recall	24.02	21.59	23.33	171.33	61.25	232.59
2004-05						
30 Day Recall (URP)	28.3	25.7	27.5	220.92	80.79	301.72
365 & 30 Day Recall Period (MRP)	21.8	21.7	21.8	170.29	68.2	238.49

Source: Report of the Expert Group on Estimation of Proportion and number of Poor, Perspective Planning Division, Planning Commission, New Delhi, July 1993.
Poverty Estimates For 2004-05, Press Information Bureau, Government of India, New Delhi, March, 2007.

Economic Survey, 2000-2001, Economic Division, Ministry of Finance, GoI.

Economic Survey, 2006-2007, Economic Division, Ministry of Finance, GoI.

Note: The data for the year 1999-2000 is not strictly comparable with that of the year 1993-94 or before because of the change in the questionnaire.

The MRP based poverty estimate for the year 2004-05 is roughly but not strictly comparable with the 30 day recall estimate of 1999-2000.

FIGURE 1: NUMBER OF POORS

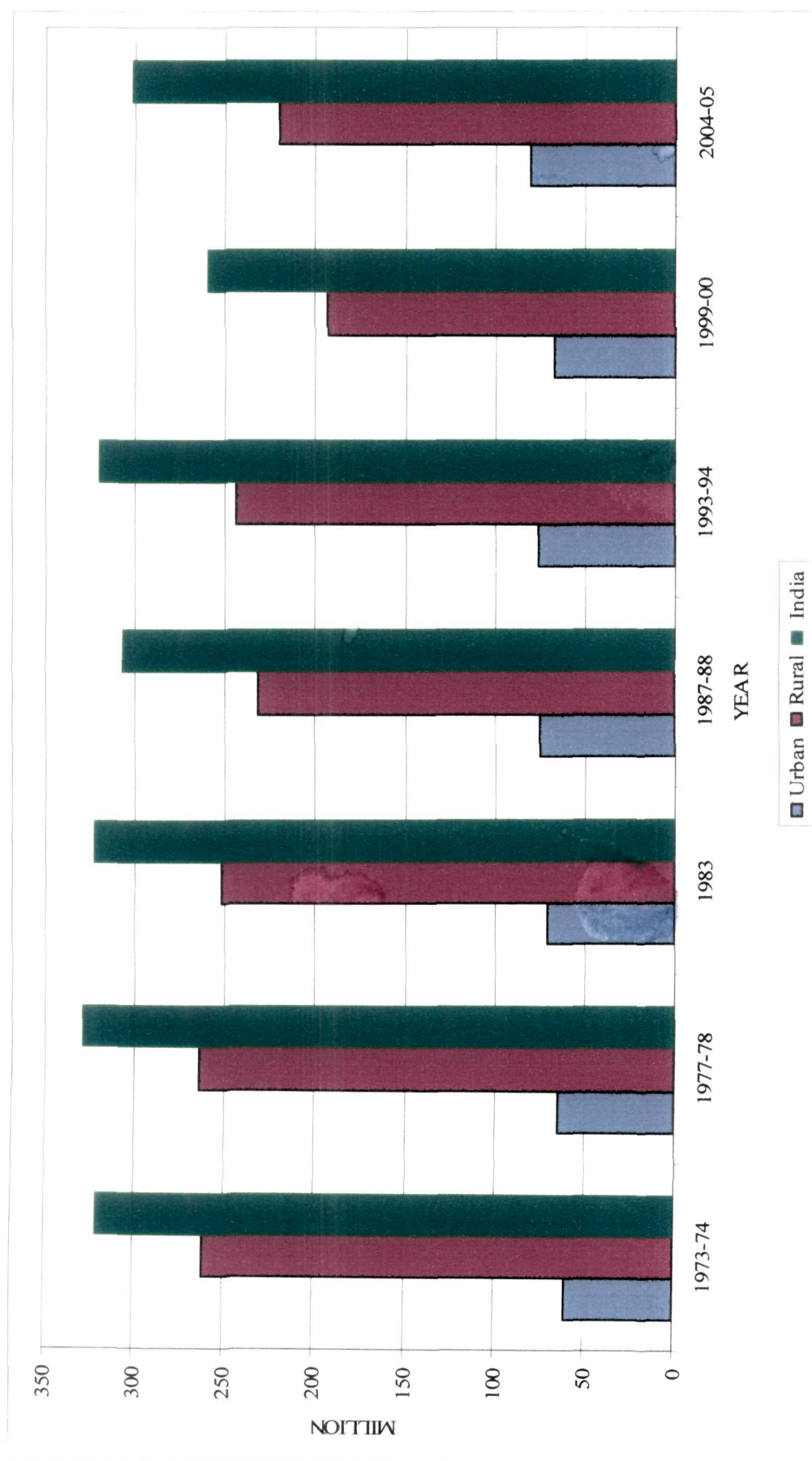
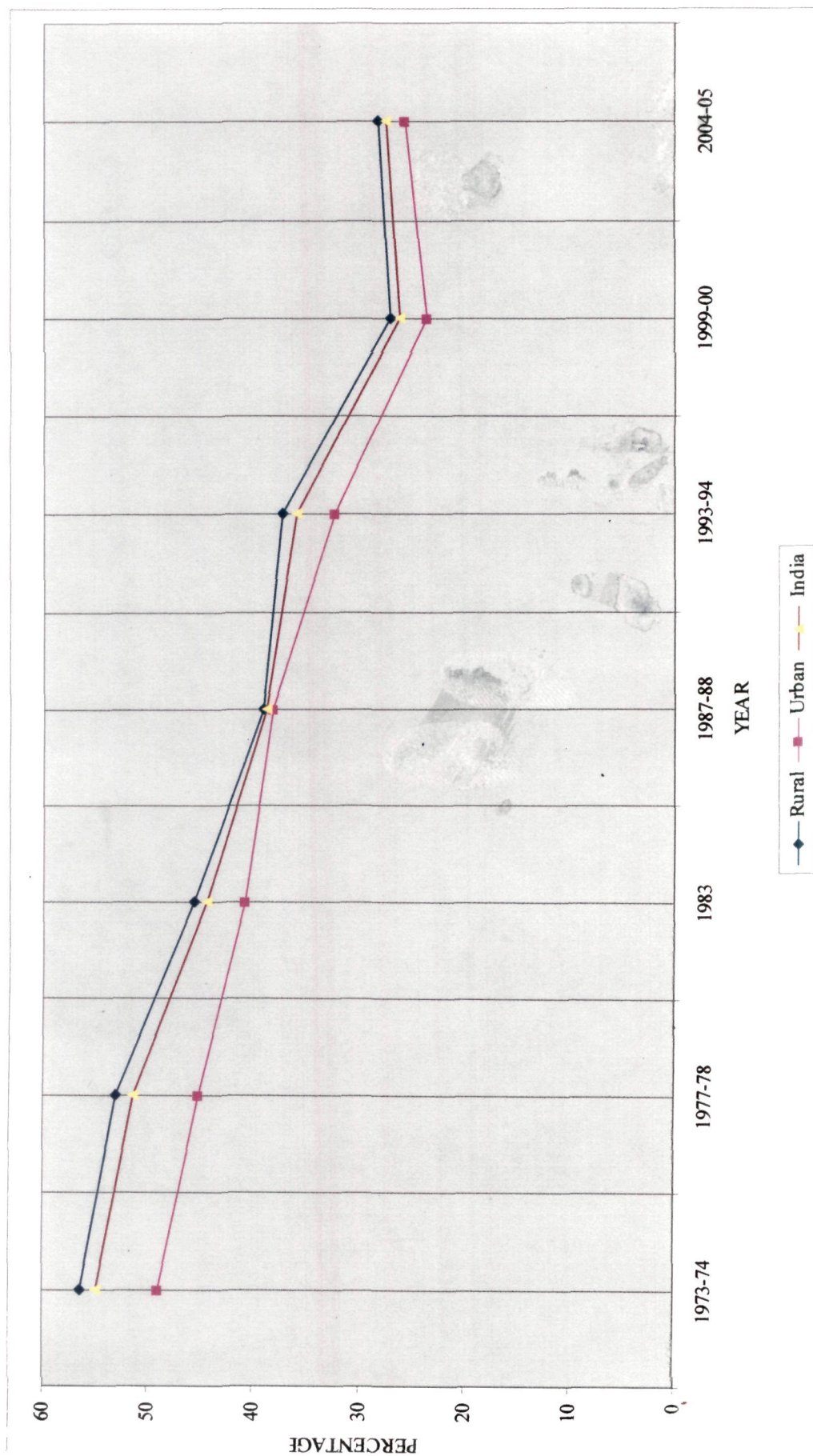


FIGURE 2: PERCENTAGE OF POOR



Poverty in India declined from 54.9 percent in 1973-74 to 36 percent in 1993-94. This decline was of 18.9 percent with an annual average decline of 0.94 percent. But during 1993-94 to 2004-05 this decline was by 8.5 percent, with an annual average decline of only 0.77 percent. If we take the period during 1973 to 1993-94 as pre-reforms period and the period during 1993-94 to 2004-05 as post-reforms period, we can say that reforms had no positive impact on poverty reduction, rather the rate of poverty reduction declined after the reforms.

The annual average decline in rural poverty and urban poverty were 0.95 percent and 0.83 percent respectively in the pre-reform period while the same figures for the post reform period were lower at 0.81 percent and 0.6 percent respectively. From this it can be concluded that the reform process at least did not have any positive impact on poverty reduction.

(i) State Wise Analysis of Poverty:

For attaining greater insight as to what has been happening to poverty reduction after reforms, a deeper look into the poverty reduction of individual states is to be taken. The state with the highest poverty ratio was Bihar. More than half the population was below poverty line in 1993-94 (Table-6). State of Assam, Madhya Pradesh, Orissa, Sikkim and Uttar Pradesh were having a poverty ratio of more than 40 percent. Among the UTs, Dadra and Nagar Haveli was having a poverty ratio of more than 50 percent.

Table 6: Number & Percentage of Population below Poverty Line (1993-94)

State/UT	Rural		Urban		Combined	
	No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)	% of Persons
Andhra Pradesh	79.49	15.92	74.47	38.33	153.97	22.19
Arunachal Pradesh	3.62	45.01	0.11	7.73	3.73	39.35
Assam	94.33	45.01	2.03	7.73	96.36	40.86
Bihar	450.86	58.21	42.49	34.5	493.35	54.96
Goa	0.38	5.34	1.53	27.03	1.91	14.92
Gujarat	62.16	22.18	43.02	27.89	105.19	24.21
Haryana	36.56	28.02	7.31	16.38	43.88	25.05
Himachal Pradesh	15.4	30.34	0.46	9.18	15.86	28.44
Jammu and Kashmir	19.05	30.34	1.86	9.18	20.92	25.17
Karnataka	95.99	29.88	60.46	40.14	156.46	33.16
Kerala	55.95	25.76	20.46	24.55	76.41	25.43
Madhya Pradesh	216.19	40.64	82.33	48.38	298.52	42.52
Maharashtra	193.33	37.93	111.9	35.15	305.22	36.86
Manipur	6.33	45.01	0.47	7.73	6.8	33.78
Meghalaya	7.09	45.01	0.29	7.73	7.38	37.92
Mizoram	1.64	45.01	0.3	7.73	1.94	25.66
Nagaland	4.85	45.01	0.2	7.73	5.05	37.92
Orissa	140.9	49.72	19.7	41.64	160.6	48.56
Punjab	17.76	11.95	7.35	11.35	25.11	11.77
Rajasthan	94.68	26.46	33.82	30.49	128.5	27.41
Sikkim	1.81	45.01	0.03	7.73	1.84	41.43
Tamil Nadu	121.7	32.48	80.4	39.77	202.1	35.03
Tripura	11.41	45.01	0.38	7.73	11.79	39.01
Uttar Pradesh	496.17	42.28	108.28	35.39	604.46	40.85
West Bengal	209.9	40.8	44.66	22.41	254.56	35.66
Andaman & Nicobar	0.73	32.48	0.33	39.77	1.06	34.47
Chandigarh	0.07	11.35	0.73	11.35	0.8	11.35
Dadra & Nagar Haveli	0.72	51.95	0.06	39.93	0.77	50.84
Delhi	0.19	1.9	15.32	16.03	15.51	14.69
Lakshadweep	0.06	25.76	0.08	24.55	0.14	25.04
Pondicherry	0.93	32.48	2.38	39.77	3.31	37.4
India	2440.31	37.27	763.37	32.36	3203.68	35.97

Source: (i) Report of the Expert Group on Estimation of Proportion and Number of Poor, Perspective Planning Division, Planning Commission, New Delhi, July 1993.

Notes: (i) Poverty Ratio of Assam is used for Sikkim, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland and Tripura

(ii) Poverty Line of Maharashtra and expenditure distribution of Goa is used to estimate poverty ratio of Goa.

(iii) Poverty Line of Himachal Pradesh and expenditure distribution of Jammu & Kashmir is used to estimate poverty ratio of Jammu & Kashmir

(iv) Poverty Ratio of Tamil Nadu is used for Pondicherry and A & N Island.

(v) Urban Poverty Ratio of Punjab used for both rural and urban poverty of Chandigarh.

(vi) Poverty Line of Maharashtra and expenditure distribution of Dadra & Nagar Haveli is used to estimate poverty ratio of Dadra & Nagar Haveli
(vii) Poverty Ratio of Goa is used for Daman & Diu
(viii) Poverty Ratio of Kerala is used for Lakshadweep.

(ii) NSSO 55th Round Estimates of Poverty:

Table 7: State-wise Population below Poverty Line in 1999-00
(30-day recall period)

State/UT	Rural		Urban		Combined	
	No of persons (lakhs)	% of persons	No of persons (lakhs)	% of persons	No of persons (lakhs)	% of persons
Andhra Pradesh	58.13	11.05	60.88	26.63	119.01	15.77
Arunachal Pradesh	3.8	40.04	0.18	7.47	3.98	33.47
Assam	92.17	40.04	2.38	7.47	94.55	36.09
Bihar	376.51	44.3	49.13	32.91	425.64	42.6
Goa	0.11	1.35	0.59	7.52	0.7	4.4
Gujarat	39.8	13.17	28.09	15.59	67.89	14.07
Haryana	11.94	8.27	5.39	9.99	17.34	8.74
Himachal Pradesh	4.84	7.94	0.29	4.63	5.12	7.63
Jammu & Kashmir	2.97	3.97	0.49	1.98	3.46	3.48
Karnataka	59.91	17.38	44.49	25.25	104.4	20.04
Kerala	20.97	9.38	20.07	20.27	41.04	12.72
Madhya Pradesh	217.32	37.06	81.22	38.44	298.54	37.43
Maharashtra	125.12	23.72	102.87	26.81	227.99	25.02
Manipur	6.53	40.04	0.66	7.47	7.19	28.54
Meghalaya	7.89	40.04	0.34	7.47	8.23	33.87
Mizoram	1.4	40.04	0.45	7.47	1.85	19.47
Nagaland	5.21	40.04	0.28	7.47	5.49	32.67
Orissa	143.69	48.01	25.4	42.83	169.09	47.15
Punjab	10.2	6.35	4.29	5.75	14.49	6.16
Rajasthan	55.06	13.74	26.78	19.85	81.83	15.28
Sikkim	2	40.04	0.04	7.47	2.05	36.55
Tamil Nadu	80.51	20.55	49.97	22.11	130.48	21.12
Tripura	12.53	40.04	0.49	7.47	13.02	34.44
Uttar Pradesh	412.01	31.22	117.88	30.89	529.89	31.15
West Bengal	180.11	31.85	33.38	14.86	213.49	27.02
A & N Island	0.58	20.55	0.24	22.11	0.82	20.99
Chandigarh	0.06	5.75	0.45	5.75	0.51	5.75
Dadra & Nagar Haveli	0.3	17.57	0.03	13.52	0.33	17.14
Daman & Diu	0.01	1.35	0.05	7.52	0.06	4.44
Delhi	0.07	0.4	11.42	9.42	11.49	8.23
Lakshadweep	0.03	9.38	0.08	20.27	0.11	15.6
Pondicherry	0.64	20.55	1.77	22.11	2.41	21.67
India	1932.43	27.09	670.07	23.62	2602.5	26.1

Source: NSSO 55th Round Survey, Planning Commission, Government of India.

Note: Same as Table 6

The 55th round of NSSO evolved a new design of measuring poverty. It had two types of estimates. The first one was on the basis of 30 day recall period and the other was on the basis of 7 day recall period. The estimates based on 30-day recall, showed a marked reduction in poverty rates between 1993-94 and 1999-2000. Rural poverty ratio fell from 37 to 27 percent, and urban poverty ratio fell from 33 to 24 percent, so that All-India poverty fell by 10 percentage points, from 36 to 26 percent between the six year periods of 1993-94 to 1999-2000. The estimates based on 7 day recall period were much lower at 23.33 percent for the country as a whole. For the rural population it was 24.02 percent and for the urban population it was 21.59 percent (Appendix 8).

There are some lacunae in the process of estimation of the 55th round of NSSO estimates of poverty. For example, in 1999-2000 the rural poverty line of Assam was Rs21.44 more than the urban poverty line because of which Assam had a high rural poverty of 40.04 percent and a low urban poverty of 7.47 percent. The same figures for 2004-05 as per URP estimates are 22.3 percent and 3.3 percent (Table 2, Table 3). Although these estimates were accepted by the Government of India, there was widespread doubt about their validity, with a strong counter argument that estimated poverty ratio because of two prominent reasons, the first being that the consumption over the 30-day reporting period had been upwardly biased by the simultaneous presence of the 7-

day questions and secondly as a new experimental questionnaire of 7 day recall period was introduced in addition to the traditional 30-day recall questionnaire (Deaton&Dreze,2002)¹³. The experimental questionnaire used a seven-day recall period for food, pan, and tobacco, as well as a 365-day recall period for less frequently purchased goods such as durables, clothing, footwear, educational and institutional medical expenditures. Prior to 1999-2000 the traditional 30-day recall questionnaire and the experimental questionnaire were administered to different and independent samples of households. These alternative questionnaires produced two independent series of expenditure estimates, with a fairly stable ratio of the lower estimates based on the traditional questionnaire to the higher estimates based on the experimental questionnaire. In 1999-2000, the 30-day and seven-day recall periods for food, pan and tobacco were used for the same households, in two adjacent columns on the same pages of a single question, this effectively new questionnaire design led to a sudden reconciliation of the results obtained from the two different recall periods. The presence of both questionnaires on the survey increased the interviewing time, and forced a number of other changes to the survey. This reconciliation is likely to boost the expenditure estimates based on 30-day data, and therefore to pull down the official poverty counts, which are based on these 30-day expenditures. In addition, only the 365-day questionnaire was used for the less frequently purchased items, and this

abandonment of the traditional 30-day recall for durables and other items also brings down the poverty count. Indeed, most people report no such purchases over 30 days, but report something over 365 days. The lower values of the consumption distribution are thereby inflated. For these reasons, the estimates of 1999-2000 are not comparable to previous estimates.

(iii) NSSO 61st Round Estimates of Poverty:

This round covers the period from July 2004 to June 2005. Here also there are two estimates of poverty. First is of 30 day uniform recall period (URP) and the second is of 365 and 30 day mixed recall period (MRP). According to the provisional data the poverty ratio at All-India level as per uniform recall period is 27.8 percent and as per mixed recall period the poverty ratio is 22 percent. In the uniform recall period consumer expenditure data is collected for all the items and the recall period is of 30 days. In the mixed recall period data is collected through two methods. In the first method based on 365 days recall data for five non-food items, namely durable goods, clothing, footwear, educational and institutional medical expenses are collected. In the second method data is collected for all the remaining items on 30 day recall period basis. The estimates of URP consumption distribution of this round is comparable to the poverty estimates of 1993-94 unlike those of 1999-2000 which are not comparable with the poverty data of 1993-94, due to the change in methodology. But at the same time the estimates of

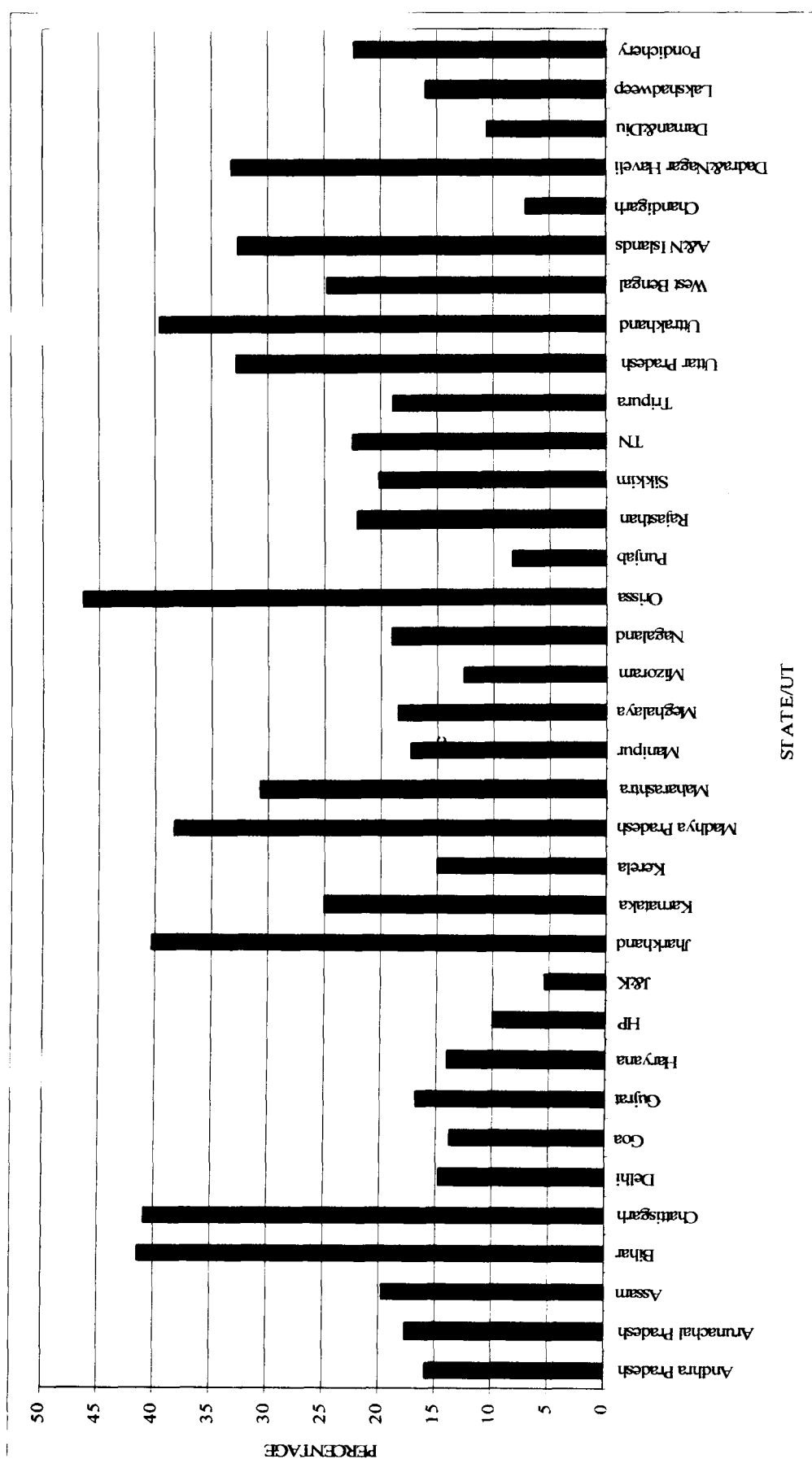
consumption distribution of 2004-05 are not strictly comparable with the poverty estimates of 1999-2000.

According to the URP consumption distribution data of NSSO 61st round the poverty ratio for rural areas was 28.3 percent, 25.7 percent in the urban areas and for the country as a whole it was 27.5 percent. According to the MRP consumption distribution data of NSSO 61st round the poverty ratio for rural areas was ^{132%} 21.8 percent, 21.7 percent in the urban areas and for the country as a whole it was 21.8 percent. The estimates of URP consumption distribution of this round is comparable to the poverty estimates of 1993-94 unlike those of 1999-2000 which are not comparable with the poverty data of 1993-94, due to the change in methodology. The good news is that poverty is reducing but the bad news is that approximately 73.33% of the total poor are concentrated in the rural areas. Crueler is the fact that only six states, viz. Bihar, Madhya Pradesh, Orissa, Jharkhand, Chattisgarh and Uttrakhand contribute more than 40 percent to the total poverty. There are states where a little less than half of their population is below the poverty line, given that India has been an Independent, Republic and Democratic country for past 60 years. As per the URP estimates the states with the lowest poverty ratio was Jammu and Kashmir and the state with highest poverty ratio was Orissa while the state with the highest numbers of poor was Uttar Pradesh (Table-8).

Table 8: State-wise Population below Poverty Line in 2004-05
(URP-Consumption)

State/UT	Rural		Urban		Combined	
	% of persons	no. of persons (lakhs)	% of persons	no. of persons (lakhs)	% of persons	no. of persons (lakhs)
Andhra Pradesh	11.2	64.7	28	61.4	15.8	126.1
Arunachal Pradesh	22.3	1.94	3.3	0.09	17.6	2.03
Assam	22.3	54.5	3.3	1.28	19.7	55.77
Bihar	42.1	336.72	34.6	32.42	41.4	369.15
Chattisgarh	40	71.5	41.2	19.47	40.9	90.96
Delhi	6.9	0.63	15.2	22.3	14.7	22.93
Goa	5.4	0.36	21.3	1.64	13.8	2.01
Gujrat	19.1	63.49	13	27.19	16.8	90.69
Haryana	13.6	21.49	15.1	10.6	14	32.1
Himachal Pradesh	10.7	6.14	3.4	0.22	10	6.36
Jammu & Kashmir	4.6	3.66	7.9	2.19	5.4	5.85
Jharkhand	46.3	103.19	20.2	13.2	40.3	116.39
Karnataka	20.8	75.05	32.6	63.83	25	138.89
Kerela	13.2	32.43	20.2	17.17	15	49.6
Madhya Pradesh	36.9	175.65	42.1	74.03	38.3	249.68
Maharashtra	29.6	171.13	32.2	146.25	30.7	317.38
Manipur	22.3	3.76	3.3	0.2	17.3	3.95
Meghalaya	22.3	4.36	3.3	0.16	18.5	4.52
Mizoram	22.3	1.02	3.3	0.16	12.6	1.18
Nagaland	22.3	3.87	3.3	0.12	19	3.99
Orissa	46.8	151.75	44.3	26.74	46.4	178.49
Punjab	9.1	15.12	7.1	6.5	8.4	21.63
Rajasthan	18.7	87.38	32.9	47.51	22.1	134.89
Sikkim	22.3	1.12	3.3	0.02	20.1	1.14
Tamil Nadu	22.8	76.5	32.2	69.13	22.5	145.62
Tripura	22.3	6.18	3.3	0.2	18.9	6.38
Uttar Pradesh	33.4	473	30.6	117.03	32.8	590.03
Uttarakhand	40.8	27.11	36.5	8.85	39.6	25.96
West Bengal	28.6	173.22	14.8	35.14	24.7	208.36
A&N Islands	22.9	0.6	22.2	0.32	32.6	0.92
Chandigarh	7.1	0.08	7.1	0.67	7.1	0.74
D&Nagar Haveli	39.8	0.68	19.1	0.15	33.2	0.84
Daman&Diu	5.4	0.07	21.2	0.14	10.5	0.21
Lakshadweep	13.3	0.06	20.2	0.06	16	0.11
Pondichery	22.9	0.78	22.2	1.59	22.4	2.37
All India	28.3	2209.24	25.7	807.96	27.5	3017.2

FIGURE 3: PERCENTAGE OF POPULATION BELOW POVERTY LINE (2004-05)



Source: Poverty Estimates for 2004-05, Press Information Bureau, Government of India, New Delhi, March, 2007

Notes: (i) Poverty Ratio of Assam is used for Sikkim, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland and Tripura.

(ii) Poverty Line of Maharashtra & expenditure distribution of Goa is used to estimate poverty ratio of Goa.

(iii) Poverty Ratio of Tamil Nadu is used for Pondicherry and A & N Island.

(iv) Urban Poverty Ratio of Punjab used for both rural and urban poverty of Chandigarh.

(v) Poverty Line of Maharashtra and expenditure distribution of Dadra & Nagar Haveli is used to estimate poverty ratio of Dadra & Nagar Haveli.

(vi) Poverty Ratio of Goa is used for Daman & Diu.

(vii) Poverty Ratio of Kerala is used for Lakshadweep. 134a

4 (VI) RELATIONSHIPS BETWEEN ECONOMIC GROWTH AND POVERTY:

(i) Correlation between Economic Growth and Poverty Ratios:

A very simple but strong argument goes by the theme that if there needs to be an overall well being in an economy then there must be some growth. That is, once there is economic growth then poverty will subsequently decline. With the help of Karl Pearson's correlation method, the correlation between economic growth and poverty ratios is calculated.

Table 9: Growth and Poverty Ratios

Year	GDP at factor cost	Poverty Ratios
	X (Rs.crore)	Y (%)
1973-74	311894	54.90
1977-78	374235	51.36
1983	471742	44.50
1987-88	556778	38.90
1993-94	781345	36.00
2004-05	1529408	27.50

Source: Economic Surveys, GoI, Various Issues 134b

Result: $r = -0.901$, $P = 0.014$ (Appendix-10).

The above correlation analysis shows that there is a strong positive correlation between economic growth in terms of GDP at factor cost and poverty ratios. This correlation is significant at 0.05 levels. This turns out

to be good news and establishes the fact that as India is growing economically the poverty is declining. Now in order to gain a further insight into this phenomenon a similar correlation analysis is to be done with state's economic growth measured by its net state domestic product and its respective poverty ratios.

(ii) Calculation of the Correlation Coefficient between State wise Economic Growth and Poverty:

As this study concentrates on the period after the economic reforms of 1991 hence, this section is based on the data that are available after 1991.

When the estimates of poverty in 2004-05 (Table-8) are compared with the performance of states in terms of their improvement in increasing their per capita net state domestic product (Chapter-3, Table-13) some important finding is evident. The states like Madhya Pradesh and Bihar were some of the top performers in terms of increasing their per capita net state domestic product and interestingly these two states had a poverty ratio of around 40 percent. This result holds true irrespective of whether we take Madhya Pradesh and Chattisgarh as one or different and the same holds true for Bihar and Jharkhand also. Whereas on the other side Orissa which was a bad performer in the field of per capita net state domestic product was having poverty ratio of more than 40 percent and Assam which is again a poor performer in the field

of per capita net state domestic product is having a poverty ratio of only 17.6 percent.

The interpretation that follows is that more of income is no guarantee for lesser poverty and similarly less of income is not solely responsible for more of poverty.

In order to quantify the above interpretation a detailed correlation study using Spearman's rank correlation method is done between the economic growth statistics and poverty ratios of respective states. In rank correlation, the relationship between two variables is not established directly, rather the variables are ranked in some particular order, be it ascending or descending and then a relationship is established between these two ranks. In this case it is possible to expect that the state or union territory with the highest growth or NSDP will be having the lowest poverty ratio.

In Table-10 first the net state domestic product (NSDP) of the respective states and union territory are taken for the year 1993-94 and then they are ranked accordingly in ascending order with the rank first being given to the state with the lowest NSDP. Following this, the respective state's poverty ratio is taken and then they are also ranked in ascending order with the first rank being given to the state or union territory with the lowest poverty ratio. And finally with the help of Spearman's rank correlation method the correlation between NSDP and poverty ratio is calculated.

Table 10: States Ranked in Increasing Order as per Net State Domestic Product and Poverty Ratios (1993-94).

State/UT	NSDP	Rank of (i)	Poverty Ratio	Rank of (ii)	(ii) – (iii)	(v) ²
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Andhra Pradesh	51655	27	22.19	5	22	484
Arunachal Pradesh	812	4	39.35	22	-18	324
Assam	13477	14	40.86	24	-10	100
Bihar	34183	21	54.96	29	-8	64
Goa	2002	11	14.92	4	7	49
Gujrat	42560	23	24.21	6	17	289
Haryana	19422	17	25.05	7	10	100
Himachal Pradesh	4250	12	28.44	12	0	0
Jammu & Kashmir	5500	13	25.17	8	5	25
Karnataka	36982	22	33.16	13	9	81
Kerala	23851	18	25.43	9	9	81
Madhya Pradesh	46100	24	42.52	26	-2	4
Maharashtra	101767	29	36.86	18	11	121
Manipur	1141	6	33.78	14	-8	64
Meghalaya	1309	8	37.92	19	-11	121
Mizoram	618	3	25.66	10	-7	49
Nagaland	1251	7	37.93	20	-13	169
Orissa	16185	15	48.56	27	-12	144
Punjab	27068	19	11.77	2	17	289
Rajasthan	28977	20	27.41	11	9	81
Sikkim	337	1	41.43	25	-24	576
Tamil Nadu	51643	26	35.03	16	10	100
Tripura	1619	10	39.01	21	-11	121
Uttar Pradesh	75940	28	40.85	23	5	25
West Bengal	48398	25	35.66	17	8	64
A & N Islands	468	2	34.47	15	-13	169
Chandigarh	1371	9	11.35	1	8	64
Delhi	18967	16	14.69	3	13	169
Pondicherry	829	5	53.82	28	-23	529

Source: (i) Economic Surveys, GoI, Various Issues

(ii) Report of the Expert Group on Estimation of Proportion and number of Poor, Perspective Planning Division, Planning Commission, New Delhi, July 1993.

Note: (i) Net State Domestic Product in Rs Crores

(ii) Ranking of States as per Net State Domestic Product in ascending order

(iii) Poverty Ratios

(iv) Ranking of States as per Poverty Ratios

(v) Difference between the Ranks of States as per NSDP and Rank of State as per Poverty Ratios (ii – iv)

(vi) Square of the difference in Ranks

(vii) Poverty estimate are on a 30 days recall basis for 1999-00.

In Table-11 the same process is repeated for finding the correlation between state's NSDP and poverty ratio is carried out for the year 1999-2000.

Table 11: States Ranked in Increasing Order as per Net State Domestic Product and Poverty Ratios (1999-00).

State/UT	NSDP	Rank of (i)	Poverty Ratio	Rank of (ii)	(ii)-(iii)	(v) ²
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Andhra Pradesh	112966	26	15.77	11	15	225
Arunachal Pradesh	1457	4	33.47	22	-18	324
Assam	26273	14	36.09	25	-11	121
Bihar	64167	20	42.6	28	-8	64
Goa	5827	11	4.4	2	9	81
Gujrat	92280	24	14.07	9	15	225
Haryana	42922	16	8.74	7	9	81
Himachal Pradesh	10882	12	7.63	5	7	49
Jammu & Kashmir	12182	13	3.48	1	12	144
Karnatka	84696	22	20.04	13	9	81
Kerala	56944	19	12.72	8	11	121
Madhya Pradesh	90382	23	37.43	27	-4	16
Maharashtra	216641	29	25.02	17	12	144
Manipur	2466	6	28.54	19	-13	169
Meghalaya	2908	8	33.87	23	-15	225
Mizoram	1288	3	19.47	12	-9	81
Nagaland	2330	5	32.67	21	-16	256
Orissa	34223	15	47.15	29	-14	196
Punjab	54257	18	6.16	4	14	196
Rajasthan	69491	21	15.28	10	11	121
Sikkim	758	1	36.55	26	-25	625
Tamil Nadu	112554	25	21.12	15	10	100
Tripura	4193	10	34.44	24	-14	196
Uttar Pradesh	153498	28	31.15	20	8	64
West Bengal	116899	27	27.02	18	9	81
A & N Islands	848	2	20.99	14	-12	144
Chandigarh	3650	9	5.75	3	6	36
Delhi	48567	17	8.23	6	11	121
Pondicherry	2787	7	21.67	16	-9	81

Source: Various Economic Surveys and NSSO 55th Round Survey, Planning Commission, Government of India

Note: Same as Table 12

In Table-12 also, the above process is again repeated in order to calculate the correlation between NSDP and poverty ratio for the year 2004-05.

Table 12: States Ranked in Increasing Order as per Net State Domestic Product and URP Poverty Ratios (2004-05).

State/UT	NSDP	Rank of (i)	Poverty Ratio	Rank of (ii)	(ii) – (iii)	(v) ²
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Andhra Pradesh	183123	25	15.8	9	16	256
Arunachal Pradesh	2266	2	17.6	12	-10	100
Assam	38624	13	19.7	14	-1	1
Bihar	51194	14	41.4	27	-13	169
Jharkhand	37161	12	40.3	25	-13	169
Goa	8582	7	13.8	5	2	4
Gujrat	152516	23	16.8	10	13	169
Haryana	73645	16	14	6	10	100
Himachal Pradesh	17884	9	10	4	5	25
Jammu & Kashmir	18009	10	5.4	1	9	81
Karnataka	132198	22	25	20	2	4
Kerela	89452	19	15	8	11	121
Madhya Pradesh	91432	20	38.3	23	-3	9
Chattisgarh	33614	11	40.9	26	-15	225
Maharashtra	328451	28	30.7	21	7	49
Manipur	3680	3	17.3	11	-8	64
Meghalaya	4754	4	18.5	13	-9	81
Orissa	52240	15	46.4	28	-13	169
Punjab	79010	17	8.4	3	14	196
Rajasthan	98573	21	22.1	16	5	25
Sikkim	1375	1	20.1	15	-14	196
Tamil Nadu	167183	24	22.5	18	6	36
Uttar Pradesh	205249	27	32.8	22	5	25
Uttanchal	17707	8	39.6	24	-16	256
West Bengal	189489	26	24.7	19	7	49
Chandigarh	6879	6	7.1	2	4	16
Delhi	83085	18	14.7	7	11	121
Pondicherry	5839	5	22.4	17	-12	144

Source: Economic Survey 2006-07 and Poverty Estimates for 2004-05, Press Information Bureau, Government of India, New Delhi, March, 2007

In Table-13 first the increase in NSDP between the period 1993-94 and 2004-05 is ranked in an ascending order with the state with the

highest increase being given the first rank. Secondly the states are again ranked according to their decrease in poverty between 1993-94 and 2004-05. This time they are ranked in descending order with the first rank being given to states with the highest reduction in poverty.

Table 13: Ranking Of States as per Increase in Net Domestic Product and Decrease in Poverty Ratio between 1993-94 and 2004-05

State/UT	NSDP 2004- 05	NSDP 1993- 94	(i)-(ii)	Rank as per (i)-(ii)	Poverty Ratio 1993-94	Poverty Ratio 2004-05	(v) - (vi)	Rank as per (v)- vi)	(iv)- (viii)
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
Andhra Pradesh	183123	51655	131468	3	22.19	15.8	6.39	17	-10.61
Arunachal Pradesh	2266	812	1454	24	39.35	17.6	21.75	2	19.75
Assam	38624	13477	25147	15	40.86	19.7	21.16	4	17.16
Bihar	51194	34183	17011	16	54.96	41.4	13.56	9	4.56
Goa	8582	2002	6580	19	14.92	13.8	1.12	24	-22.88
Gujarat	152516	42560	109956	6	24.21	16.8	7.41	16	-8.59
Haryana	73645	19422	54223	11	25.05	14	11.05	11	0.05
Himachal Pradesh	17884	4250	13634	17	28.44	10	18.44	7	11.44
Jammu & Kashmir	18009	5500	12509	18	25.17	5.4	19.77	5	14.77
Karnataka	132198	36982	95216	7	33.16	25	8.16	14	-5.84
Kerala	89452	23851	65601	9	25.43	15	10.43	13	-2.57
Madhya Pradesh	91432	46100	45332	13	42.52	38.3	4.22	21	-16.78
Maharashtra	328451	101767	226684	1	36.86	30.7	6.16	18	-11.84
Manipur	3680	1141	2539	23	33.78	17.3	16.48	8	8.48
Meghalaya	4754	1309	3445	22	37.92	18.5	19.42	6	13.42
Orissa	52240	16185	36055	14	48.56	46.4	2.16	23	-20.84
Punjab	79010	27068	51942	12	11.77	8.4	3.37	22	-18.63
Rajasthan	98573	28977	69596	8	27.41	22.1	5.31	19	-13.69
Sikkim	1375	337	1038	25	41.43	20.1	21.33	3	18.33
Tamil Nadu	167183	51643	115540	5	35.03	22.5	12.53	10	2.53
Uttar Pradesh	205249	75940	129309	4	40.85	32.8	8.05	15	-6.95
West Bengal	189489	48398	141091	2	35.66	24.7	10.96	12	-1.04
Chandigarh	6879	1371	5508	20	11.35	7.1	4.25	20	-15.75
Delhi	83085	18967	64118	10	14.69	14.7	-0.01	25	-25.01
Pondicherry	5839	829	5010	21	53.82	22.4	31.42	1	30.42

Source: Table 12 and Table 14.

Note: (i) States ranked as per increase in Net Domestic Product
(ii) States ranked as per in decrease as per Poverty Ratios
(iii) Difference between the two ranks
(iv) Square of the difference between the two ranks

(iii) Results of the Correlation Analysis:

1. The Correlation Coefficient between Net State Domestic Product and Poverty Ratios (1993-94) as calculated from Table-12 = (-) 0.098. Here the P value is 0.615 (Appendix-10).

2. The Correlation Coefficient between Net State Domestic Product and Poverty Ratios (1999-00) as calculated from Table-3 = (-) 0.076. Here the P value is 0.696 (Appendix-10). ^{141 a}

3. The Correlation Coefficient between Net State Domestic Product and Poverty Ratios (2004-05) as calculated from Table-14= (+) 0.217. Here the P value is 0.267 (Appendix-11).

4. The Correlation Coefficient between States ranked in terms of increase in State Domestic Product between 1993-94 and 2004-05 and the respective decline in state Poverty Ratios as calculated from Table-15 = (-) 0.462. Here the P value is 0.020 (Appendix-11).

If we go by the reasoning of trickle down hypothesis it can be said that more the state domestic product lesser will be the poverty over there and as the state domestic product of that particular state will increase more of the positive externalities would ^{141 b}percolate to the bottom leading to diminishing poverty. Ironically, the correlation coefficient between state domestic product and poverty ratios shows a weak correlation. It is (-) 0.09 for 1993-94 and it is further weaker at (-) 0.07 for 1999-00. To make matter worse it turned positive at 0.21 in 2004-05, implying that

the states with a higher per capita income had a higher poverty. That is to say, that more of income is no guarantee for lesser poverty. Same is the case for relation between state domestic product and poverty ratio.

When we analyze the situation on the basis of increase or decrease of state domestic product and poverty ratio between the years 1993-94 and 2004-05, almost all the states had significant deviation between ranks. Though state-wise poverty ratios have witnessed a secular decline from 1993-94 to 2004-05 at the macro level but interstate disparities are clearly visible. Also the poverty ratios have decreased during this period. But the degree of correlation between the increase in state domestic product and decrease in poverty between 1993-94 and 2004-05 is as low as minus 0.462, implying that there is not a strong correlation between the increase in state domestic products and decrease in the poverty ratios. This can be interpreted as: an increase in income is no guarantee to poverty reduction, which in other words mean economic growth doesn't simple trickle down.

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CHAPTER-V

PATTERN OF GROWTH AND ITS IMPACT ON EMPLOYMENT

PATTERN OF GROWTH AND ITS IMPACT ON EMPLOYMENT

The expansion of productive employment forms the basics for economic development and sustained poverty reduction in a developing economy. One of the biggest challenge before India has been the removal of unemployment. Planning in India focused at realizing a high rate of growth of output in the long term. The basic priority in the initial years of planning was growth as a result initially the planning process made no attempt to define an independent employment strategy as the focus on economic growth was viewed as essential for improving the employment situation. Initially labor force expansion was not seen as a major problem. Thus initially the five year plans viewed employment generation as a part of the growth process itself and not as a goal in conflict with, or to be pursued independently of economic growth.

Over the last two decades, there has been major economic changes accompanied by rapid progress in science and technology, which is drastically altering the working of the economy particularly methods of production. The recent emphasis is on liberalization of trade, competitiveness and the liberal employer–employee relationships which have given birth to new paradigms which had both positive and negative aspects. After the reforms the growth indicators have certainly shown improvement but it has led to some other problems. The economy is

continuously under the pressure to promote competition, privatize and globalize but parallel to this, there is also considerable pressure from the workforce concerned about job security and social protection and the most challenging task at the present moment is to balance these two conflicting positions as it is feared that over emphasis on social protection and social security can be counter productive in the present scenario of global competition. At the same time it is also equally important that the work force could not be left at the mercy of the market forces as they will find themselves in the a helpless situation without commitment and support from the government. The reforms, high turnover of technology and increasing competitiveness makes it incumbent on the public and private sector companies in India to rationalize their manpower bases, place the additional labor on a new learning curve, and redeploy the newly retrained personnel in niche business area. However, the transition phase also calls upon the economic planners and business to reconcile growth and its components like competitiveness with the tenets of social justice. The workforce is the country is today in the grips of a severe retrenchment phase. To the average worker, there is neither guarantee of employment security nor income security. There is a paradigm shift in the nature of skills in demand. Reforms particularly globalization makes it necessary for the labor force to adopt new skills to cope with the competition. This also bring with it large labor displacement. The remedy lies is retaining

surplus labor in skill that are in demand in the sunrise industries. The responsibility for realizing these objectives, off course lies on both the public and the private sector organizations in the country.

The days of protected domestic market which were once the identity of Indian markets are over and in the new scenario what is important for staying on in the market is quality consciousness and price competitiveness. The concerns for environment, labor standards and product acceptability among others have acquired added significance. In this context adjusting to the new production patterns, product quality of workforce assumes supreme significance. And this has made the substantial reorientation of the employment market a necessity, leading to more stringent recruitment standards; even for those aspiring to employ themselves on their own, up to date knowledge of the trade and market networking are as inescapable prerequisites as are higher educational training and skill accomplishment. This is something very new for the Indian economy as never before did the Indian economy face such labor market challenges. As an after effect a dualism in the labor market is emerging. A market for educated, trained and skilled job aspirants typically characterized by modern production, marketing and management standards, with higher levels of productivity and wages is rapidly expanding, along with a simultaneous decline in the job market for their less educated, unskilled and untrained labor force. Employment prospects are thus brighter for the more qualified while at the same time

has become rarer for the untrained and the uneducated job-seekers with emerging differences in employment prospects between regular, self employment and casual workers, and still more significantly, between urban and rural area. Rural job aspirants, especially females, are the worst sufferers, primarily because of their own educational and skill deficiencies.

Now that the Indian economy has already lived through more than a full decade of the new policy regime, it is quite natural to be inquisitive about the effects of the reforms implemented so far on employment. This study looks at the pace and patterns of employment growth during the 1990s in contrast the 1980s. Without holding on or the other specific policy change responsible for causing setback or effecting improvement on the employment front, changes in employment that we observe during the 1990s are interpreted as a fall-out of all policy changes that have been ushered in during the 1990s, first in July 1991 under the package of economic reform and then in January 1995 under the WTO obligations. This study based on NSS data, looks at the employment situation of the 1990s against that during the 1980s, and attempts to figure out the challenges and threats.

5 (I) THE SOURCES OF DATA ON EMPLOYMENT:

The main sources of measuring workforce and employment are (i) Employment and Unemployment Surveys of National Sample Survey Organization (ii) Decennial Population Census, (iii) Employment Market

Information of Directorate General of Employment and Training, (iv) Annual Survey of Industries of Central Statistical Organization and (v) Economic Census and Enterprise Surveys.

The Economic Census first started in 1977. It was a census of the whole country and for all economic activities barring crop production and plantation. It was followed by Enterprise Surveys which were conducted during the intervening period between consecutive Economic Census. These were sample surveys in full detail of the unorganized portions of various sectors of the non-agricultural economy. It gathered data on not only employment but also on inputs, production, factor incomes etc.

The data collected by Annual Survey of Industries collects data of only those establishments which are covered by Factories Act (1948). It excludes defence establishments and armed forces. It covers those establishments in the private sector which employs 25 or more persons on the last day of the quarter under reference. Since 1966 it also collects data for establishments employing 10 to 24 persons.

The Employment and Unemployment Survey was first conducted by NSSO in May-September, 1955 which was its 9th survey. It gathered data for the urban sectors in 17th-20th rounds. In its 32nd round it collected data both for rural and urban areas. Since 1997-98 EUS became a formal part of NSSO. Apart from the large quinquennial rounds which are conducted every five years, NSSO also collects data annually. But these estimates are (NAD,2004)¹ not only subject to higher sampling

errors because of smaller sample size but are also biased owing to the lesser attention paid to the employment-unemployment component of the survey.

In this study we would particularly focus on the NSS data the reason being that it is a comprehensive source of data as it uses homogeneous concepts and data collection methods for a fairly long period of time. The other estimates are at a bit disadvantaged position like the decennial population census are collected after every ten years, the economic census excludes a huge portion of the workforce who are employed in crop production and plantation and the DGET data covers only those establishments which fall under the auspices of factories act of 1948. Moreover the definitions used are not the same in all sources and have been varied overtime within the same source (Himanshu, 2007)².

5 (II) NSSO AND ITS MEASUREMENT OF UNEMPLOYMENT:

NSSO uses three different methods of determining the activity status of persons. The first method seeks to identify the usual principal activity status called usual principal status, henceforth UPS, of a person by using a reference period of 365 days preceding the date of survey. A person is counted as being in the labor force if he or she is either engaged in economically gainful activities or reported seeking or being available for such activities for the major part of the preceding 365 days. A person actually working for the major part of the period is counted as

unemployed. The persons covered by the survey may be classified into those working and/or available for work in their principal activity sectors, and those working and/or available for work in a subsidiary sector, that is, a sector other than their principal activity sector. Hence, within the usual status concept, the estimates are now derived on the usual principal status as well as usual principle and subsidiary status basis. The method makes it possible to identify, with reasonable accuracy, the activity status of persons in a situation where very few people hold regular, full time jobs. Clearly, a person identified as employed could have been unemployed on certain days during the period just as a person identified as unemployed could have worked on certain days. Moreover, those classified as being outside the labor force could also have worked or searched for work on a few days during the period. Such a person is considered to have been usual subsidiary status participants in the labor force, and the surveys provide the relevant estimate. The usual status unemployment rate is a person rate and indicates chronic unemployment because all those who are found usually unemployed in the reference year are counted as unemployed. Basically it captures the long term trends.

The second method uses a reference period of seven days preceding the date of survey and seeks to determine the current activity status also called 'current weekly status; henceforth CWS of persons. A person is counted as employed if he or she is engaged in gainful activities

for at least one hour during the reference week. Correspondingly, an unemployed person is one who did not work or was seeking or available for work for at least an hour during the reference period. The implicit rule is that actual or intended participation in gainful activities has priority over actual or intended participation in all other activities. Thus a student who is engaged in gainful activities for an hour during the reference week, gets classified as employed, not as a student; similarly, a housewife, who sought or was available for gainful activities for even an hour during the reference week, gets classified as unemployed, and not as a housewife.

The third method also uses a reference period of seven days preceding the date of survey but seeks to determine the detailed time disposition of persons on each day of the week. It is called current daily status; henceforth CDS. A person is counted employed for half a day if he or she is engaged in gainful activities for between one and four hours or employed for a full day if the engagement was for four hours or more. The same rules are applied to determine the status of unemployment. Clearly, on any given day, a person could be (i) employed for the full day or (ii) employed for half the day and unemployed for the other half or (iii) employed for half the day and out of the labor force for the other half or (iv) unemployed for half the day and out of the labor force for the other half (v) unemployed for the full day or (vi) out of the labor force for the full day. Thus the CDS estimates are of person-days and not of persons.

This measure is most sensitive to any year to year fluctuations in employment and grasps all seasonal and short run factors

The analysis here is based mainly on UPS data; CWS and CDS data are used as supplementary. The reasons are as follows. When most people have regular wage employment, as in advanced industrial countries, the employment status of person during a week does not radically diverge from their usual employment status. In a developing country such as India, however, the divergence can be substantial. In any particular week, a person who usually works as self employed could be working as a casual labor, just as a usually unemployed person could be employed. Similarly a person who usually engages in farming could be engaged in some non-farm activity during the particular week. For these reasons, the CWS method is less appropriate than the UPS method for determining the employment status of person in an economy such as India's. The NSSO survey implicitly recognizes this; the UPS data provide information on a wider range of employment related characteristics of persons than do the CWS data. However, the CWS data is useful for a broad comparison of India's employment situation with that in other countries, since labor force surveys in most of these countries use the CWS method.

The CDS data refer to person day rather than to person. As such, these data are very useful for certain purpose like for determining the total quantity of labor actually employed during a given period. But

they obscure rather than illuminate some important aspects of employment conditions. For example, observed employment or unemployment of a certain number of person days does not tell us anything about the number and types of workers that supplied these person days. Similarly, it doesn't say anything about the observed distribution of person days across sectors or activities where as to understand actual employment conditions, we need to know about the categories of workers in employment of each of the categories.

All the above three rates serve different purposes but the distinction between person rates of unemployment and person day rate of unemployment is many a times not taken care of which is not appropriate. "The total number of *person-days* of employment is not the same as the total number of *employed persons*. The reason is that a given total number of *person-days* of employment could be distributed among the same number of persons in many ways so as to lead to different numbers of *persons* employed. For example, consider a four person economy in which all four participate in the work force and together they were employed for ten person-days in the week. This percent yields a person-day rate of employment of 10 out of 28 or 36%. If the ten person-days are distributed in a way that one person is employed for seven days, another for three days and the remaining two are unemployed, then person-rate of employment is two out of four or 50percent. On the other hand, if it is distributed in a way that three

persons work for three days each and one person works for just a day, the person rate of employment is four out of four or 100 percent, given the priority given to the status of employment! Unfortunately, official publications ignore the distinction between persons and person-days, and possible heterogeneity among the population in number of days worked.”³

5 (III) THE GROWTH AND PATTERN OF UNEMPLOYMENT:

(i) *The Labor Force:*

Table 1 (a): Employment and Unemployment (By Usual Principal Status)

	1983	1993-94	1999-00	2004-05
In million				
Labor Force	277.34	343.56	377.88	428.37
Work Force	269.36	334.54	367.37	415.27
No of unemployed	7.98	9.02	10.51	13.1
As a proportion of labour force in percent				
Unemployment Rate	2.88	2.62	2.78	3.06

Source: Economic Survey, 2006-2007, Economic Division, Ministry of Finance, Government of India.

Table 1 (b): Growth of Labour force and Workforce

(Growth in percent per annum)

	1983 to 1993-94	1993-94 to 1999-00	1999-00 to 2004-05
Labor Force	2.06	1.60	2.54
Work Force	2.09	1.57	2.48

Source: Economic Survey, 2006-2007, Economic Division, Ministry of Finance, Government of India.

The number of unemployed person as per usual principal status increased from 7.98 million in 1983 to 13.10 million in 2004-05 but there is a marked variation between the growth rates between these periods. The unemployment rate as per usual principal status declined from 2.88 percent in 1983 to 2.62 percent in 1993-94, but it then

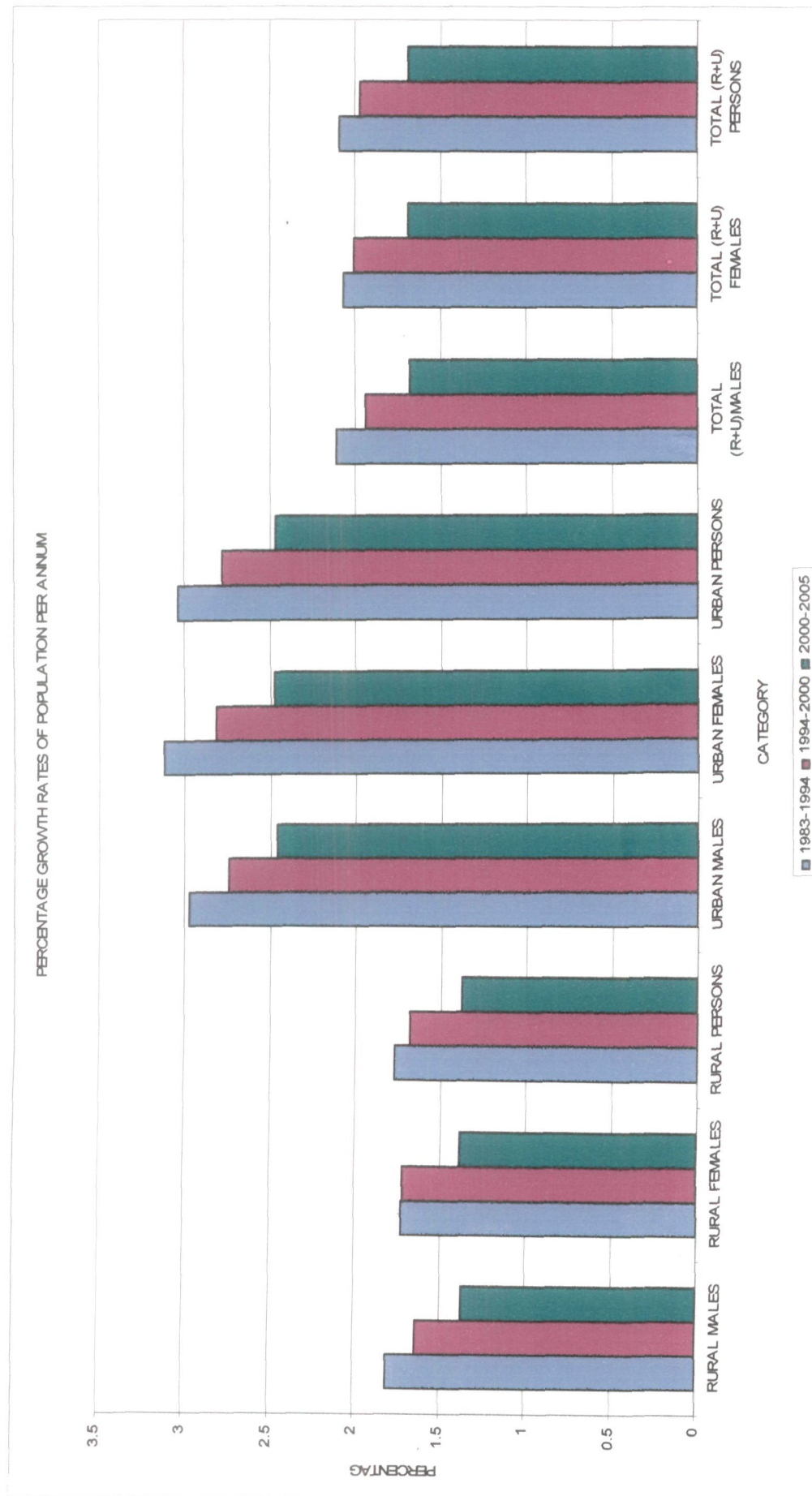
increased to 2.78 percent in 1999-2000 and then further to 3.06 percent in 2004-05 (Table-1a). This increase in unemployment cannot be solely attributed to the increase in labor force as the labor force growth was lower for the period 1993-94 to 1999-00 than what it was in 1983 to 1993-94 still the percentage of unemployed was higher. The Table 1(c) (Sundaram, 2007)⁴ and Figure 1 further classify the growth of population into rural-urban and male-female which shows that the per annum rates of growth of persons by all criteria have declined over the years. As per the table the total rural population was 400865 thousands whereas the total urban population was only 313064 thousands, that is the total rural population is more than twice the urban population but the percentage per annum growth rate is much higher in urban areas than in rural areas, probably because of rural migration.

Table 1(c): Sector Wise Unemployment Rates

Population Segment	1983	1993-94	1999-00	2004-05	Rates of Growth (% per annum)		
					1983-1994	1994-2000	2000-2005
Population in Thousands	(1.7.83)	(1.1.1994)	(1.1.2000)	(1.1.2005)			
Rural Males	281288	339642	374432	400865	1.81	1.64	1.37
Rural Females	266637	319411	353785	379102	1.73	1.72	1.39
Rural Persons	547925	659053	728217	779967	1.77	1.68	1.38
Urban Males	91217	124031	145878	164732	2.97	2.74	2.46
Urban Females	80445	111104	131244	148332	3.12	2.82	2.48
Urban Persons	171662	235135	277122	313064	3.04	2.78	2.47
Total (R+U) Males	372505	463673	520310	565597	2.11	1.94	1.68
Total (R+U) Females	347082	430515	485029	527434	2.07	2.01	1.69
Total (R+U) Persons	719587	894188	1005031	1093031	2.09	1.97	1.69

Source: Sundaram, K. (2007): "Employment and poverty in India: 2000-05", Working Paper No: 155, Centre for Development Economics, Department of Economics, DSE, New Delhi.

FIGURE 1: PERCENTAGE GROWTH RATES OF POPULATION PER ANNUM



(ii) Workforce Participation Rates:

On the basis of primary status, subsidiary status, current weekly status and current daily status NSSO assigns an activity status to every individual. On this basis a person is categorized into worker, unemployed or out of labor force. Labor force constitutes both workers and unemployed. The simplest measure of employed person in the whole population is referred to as Workforce Participation Rate which is a measure of the total number of workers in the total population. Persons categorized as working, that is, are employed and also those who are seeking or available for work or are unemployed together constitute labor force. Persons who were engaged in any economic activity constitute work force. The number of persons employed per 1000 persons is called Workforce Participation Rate (WPR). From Table-2 it is evident that for the rural male except for the estimates based on CDS all the other estimates declined up till 1987-88 and then increased till 1993-94 but between 1993-94 and 1999-2000 all the estimates had a decreasing trend. If we take the period after 1993-94 to be the reform period it could be inferred that after the reforms the WPR decreased.

The good news is that after 1999-00 and till the latest available estimates for the year 2004-05 the WPR again started rising. For the rural females the WPR except for CWS estimates remained more or less the same and declining marginally from 1993-94 to 1999-00 and then increasing. This increase was much smaller than the in case of

rural males For the urban males WPR remained almost stable till 1987-88 after which it increased till 1993-94 after which it declined. But again there was a major improvement after 1999-00 till 2004-05. More or less the same story is repeated in case of urban females also with WPR first increasing till 1993-94, then declining till 1999-00 only to recover between 1999-00 and 2004-05.

Table 2: Workforce Participation Rates

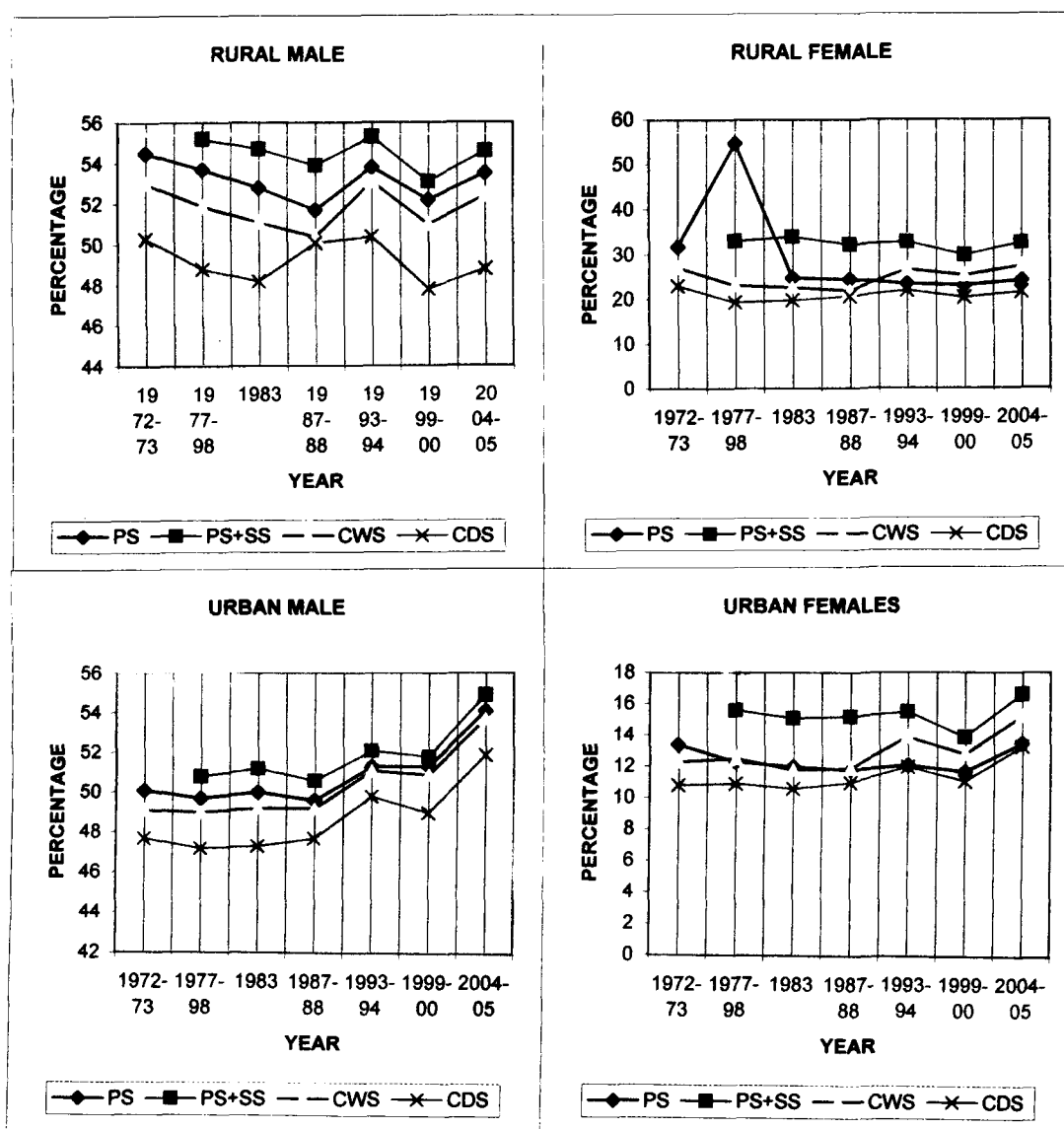
(Percentage)

	Rural Male				Rural Female			
NSS Round	PS	PS+SS	CWS	CDS	PS	PS+SS	CWS	CDS
27 (July 1972-June 1973)	54.5		53	50.3	31.8		27.2	23.1
32(July 1977-June 1978)	53.7	55.2	51.9	48.8	54.8	33.1	23.2	19.4
38(Jan-Dec 1983)	52.8	54.7	51.1	48.2	24.8	34	22.7	19.8
43(July 1987-June 1988)	51.7	53.9	50.4	50.1	24.5	32.3	22	20.7
50(July 1993-June 1994)	53.8	55.3	53.1	50.4	23.4	32.8	26.7	22
55(July 1999-June 2000)	52.2	53.1	51	47.8	23.1	29.9	25.3	20.4
61(July 2004-June 2005)	53.5	54.6	52.4	48.8	24.2	32.7	27.5	21.6
	Rural Male				Rural Female			
NSS Round	PS	PS+SS	CWS	CDS	PS	PS+SS	CWS	CDS
27 (July 1972-June 1973)	50.1		49.1	47.7	13.4		12.3	10.8
32(July 1977-June 1978)	49.7	50.8	49	47.2	12.3	15.6	12.5	10.9
38(Jan-Dec 1983)	50	51.2	49.2	47.3	12	15.1	11.8	10.6
43(July 1987-June 1988)	49.6	50.6	49.2	47.7	11.8	15.2	11.9	11
50(July 1993-June 1994)	51.3	52.1	51.1	49.8	12.1	15.5	13.9	12
55(July 1999-June 2000)	51.3	51.8	50.9	49	11.7	13.9	12.8	11.1
61(July 2004-June 2005)	54.1	54.9	53.7	51.9	13.5	16.6	15.2	13.3

Source: National Sample Survey Organization: *Employment and Unemployment Situation in India* Government of India, Various Issues.

Hence a general trend could be seen that except for rural males who had been hit hard by unemployment the WPR first increased or remained constant till 1987-88 and then increased till 1993-94 after which it again decreased but recovered after 1990-00. Overall the WPR for females are significantly lower than that of males in rural areas. The CDS rates were the lowest and the UPS rates were the highest and the

FIGURE 2 : WORKFORCE PARTICIPATION RATES



CWS rates were in between the two. The gaps between males and females were higher in females than in males. For rural areas WPR tends to fall in the long term whereas in the urban areas the trend is much stable.

(iii) Unemployment Rates:

From Table 3 and Figure 3 it is evident that for rural males the principal status and subsidiary status increased from 1.3 percent in 1977-78 to 1.8 percent in 1987-88 and then declined to 1.4 percent in 1993-94 after which it again increased to 1.7 percent and then declined marginally to 1.6 percent in 2004-05.

Table 3: Unemployment Rates

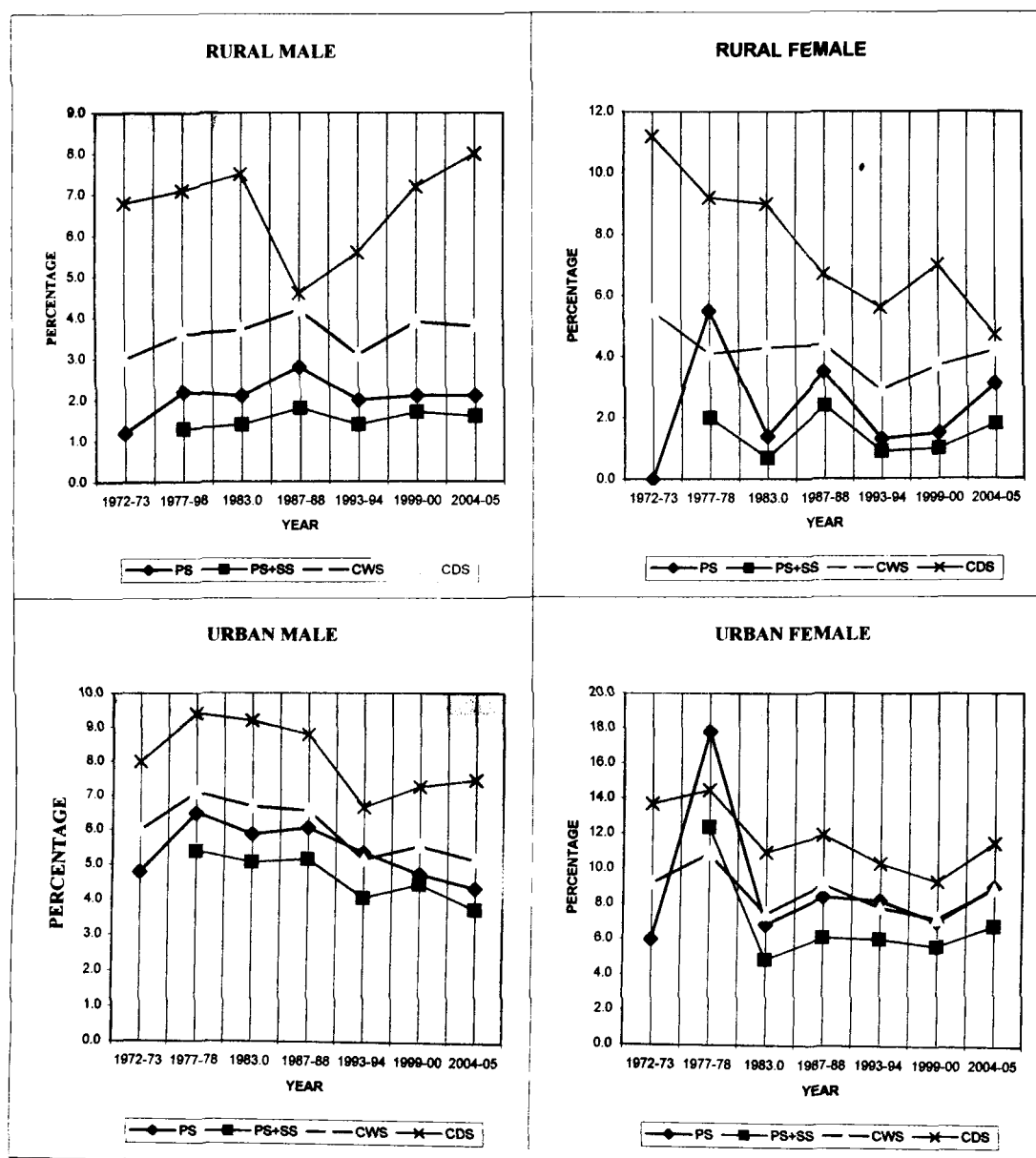
(Percentage)

Year	Rural Male				Rural Female			
	PS	PS+SS	CWS	CDS	PS	PS+SS	CWS	CDS
1972-73	1.2		3.0	6.8	0.5		5.5	11.2
1977-98	2.2	1.3	3.6	7.1	5.5	2.0	4.1	9.2
1983.0	2.1	1.4	3.7	7.5	1.4	0.7	4.3	9.0
1987-88	2.8	1.8	4.2	4.6	3.5	2.4	4.4	6.7
1993-94	2.0	1.4	3.1	5.6	1.3	0.9	2.9	5.6
1999-00	2.1	1.7	3.9	7.2	1.5	1.0	3.7	7.0
2004-05	2.1	1.6	3.8	8.0	3.1	1.8	4.2	4.7
Year	Urban Male				Urban Female			
	PS	PS+SS	CWS	CDS	PS	PS+SS	CWS	CDS
1972-73	4.8		6.0	8.0	6.0		9.2	13.7
1977-78	6.5	5.4	7.1	9.4	17.8	12.4	10.9	14.5
1983.0	5.9	5.1	6.7	9.2	6.9	4.9	7.5	11.0
1987-88	6.1	5.2	6.6	8.8	8.5	6.2	9.2	12.0
1993-94	5.4	4.1	5.2	6.7	8.3	6.1	7.9	10.4
1999-00	4.8	4.5	5.6	7.3	7.1	5.7	7.3	9.4
2004-05	4.4	3.8	5.2	7.5	9.1	6.9	9.0	11.6

Source: Government of India, National Sample Survey Organization: Employment and Unemployment Situation in India, Various Issues.

Similar trends were observed in CWS and CDS also, only the magnitude of change was more in CWS and further greater in CDS rates. For the rural females the PS+SS rates decreased from 2.4 percent in

FIGURE 3 : UNEMPLOYMENT RATES



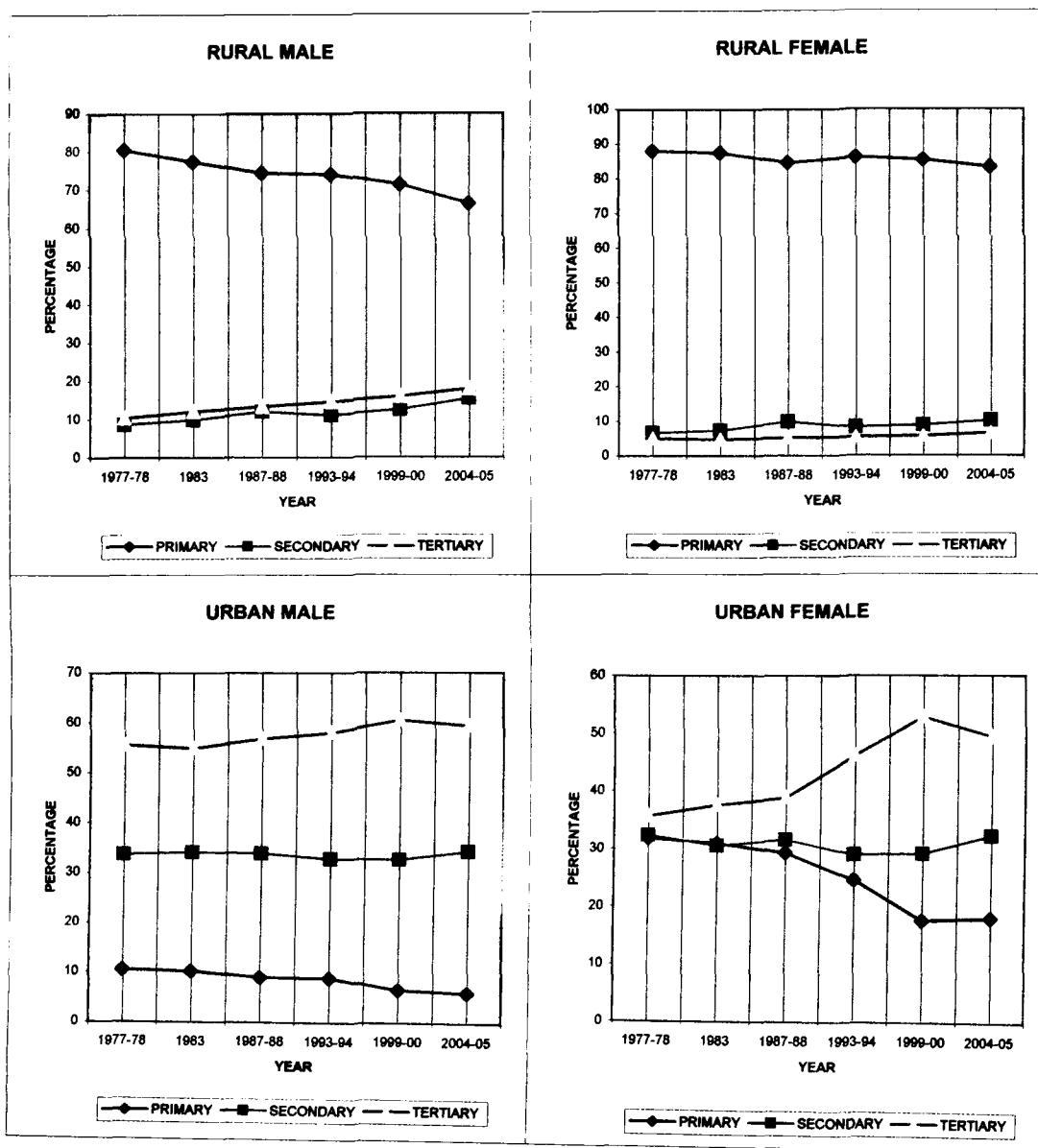
1987-88 to 0.8 percent in 1993-94 but it increased thereafter to 1.0 percent in 1999-00 and further to 1.8 percent in 2004-05. The CWS estimates for rural females also show the same trend but the CDS rates increased between 1993-94 and 1999-00 and decreased between 1999-00 and 2004-05. For urban males the same trend is noticed for PS+SS and CWS where the unemployment rates decreased till 1993-94 and then increased between 1993-94 and 1999-00 and then again decreased between 1999-00 and 2004-04.

But the CDS rates after decreasing till 1993-94 kept on increasing till 2004-05. In case of urban females the story is quite different. Here the unemployment rates kept on declining not till 1993-94 but till 1999-00 after which it increased. This is quite contrary to almost all the earlier trends as the status of unemployment worsened between 1999-00 and 2004-05. The trend which follows is one of rising unemployment by all the rates, where in the rural CDS rates are increasing much faster than others. For the urban areas till 1990 there is a declining trend after which it is increasing whereas in case of females the overall trend is a mixed one.

(iv) Sector Wise Distribution of Workers:

From Table-4 it is evident that about two third of the rural males are still engaged in the primary sector and more than 80 percent of the rural females are also engaged in the primary sector but trend wise the

FIGURE 4: SECTOR WISE DISTRIBUTION OF WORKERS



fall in the contribution of primary sector in case of rural males is more rapid than rural females.

Table 4: Sector Wise Unemployment Rates

(Percentage)

	Rural Male			Rural Female		
Year	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
1977-78	80.6	8.8	10.5	88.1	6.7	5.1
1983	77.5	10	12.2	87.5	7.4	4.8
1987-88	74.5	12.1	13.4	84.7	10	5.3
1993-94	74.1	11.2	14.7	86.2	8.3	5.5
1999-00	71.4	12.6	16	85.4	8.9	5.7
2004-05	66.5	15.5	18	83.3	10.2	6.6
	Urban Male			Urban Female		
Year	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
1977-78	10.6	33.8	55.7	31.9	32.4	35.7
1983	10.3	34.2	55	31	30.6	37.6
1987-88	9.1	34	56.9	29.4	31.7	38.9
1993-94	9	32.9	58.1	24.7	29.1	46.2
1999-00	6.6	32.8	60.6	17.7	29.3	52.9
2004-05	6.1	34.4	59.5	18.1	32.4	49.5

Source: Government of India, National Sample Survey Organization: Employment and Unemployment Situation in India, Various Issues.

On the other hand both the urban males and females show more or less the same pattern. In urban males the tertiary sector involvement is around engagement is near about one third and the only major differentiation is in primary sector in which the urban females engagement is three times that of urban males.

(v) Status of Employment:

Among rural males and rural females till 1999-00 there is a decline in self employment and an increase in casual workers. Between 1999-00 and 2004-05 this trend got reversed and there was an increase in self employment and a fall in casual workers. Among urban males self employment increased between 1900-00 and 2004-05 and casual

workers declines between the same period and regular workers kept on declining for the whole period. Among urban females self employment increased between 1999-00 and 2004-05 and casual workers declined between the entire periods of 1993-94 to 2004-05. In case of both rural and urban females regular employment grew between 1999-00 and 2004-05. Same was the case with rural males but for urban males there was a fall in regular employment between 1999-00 and 2004-05.

Table 5: Status of Employment

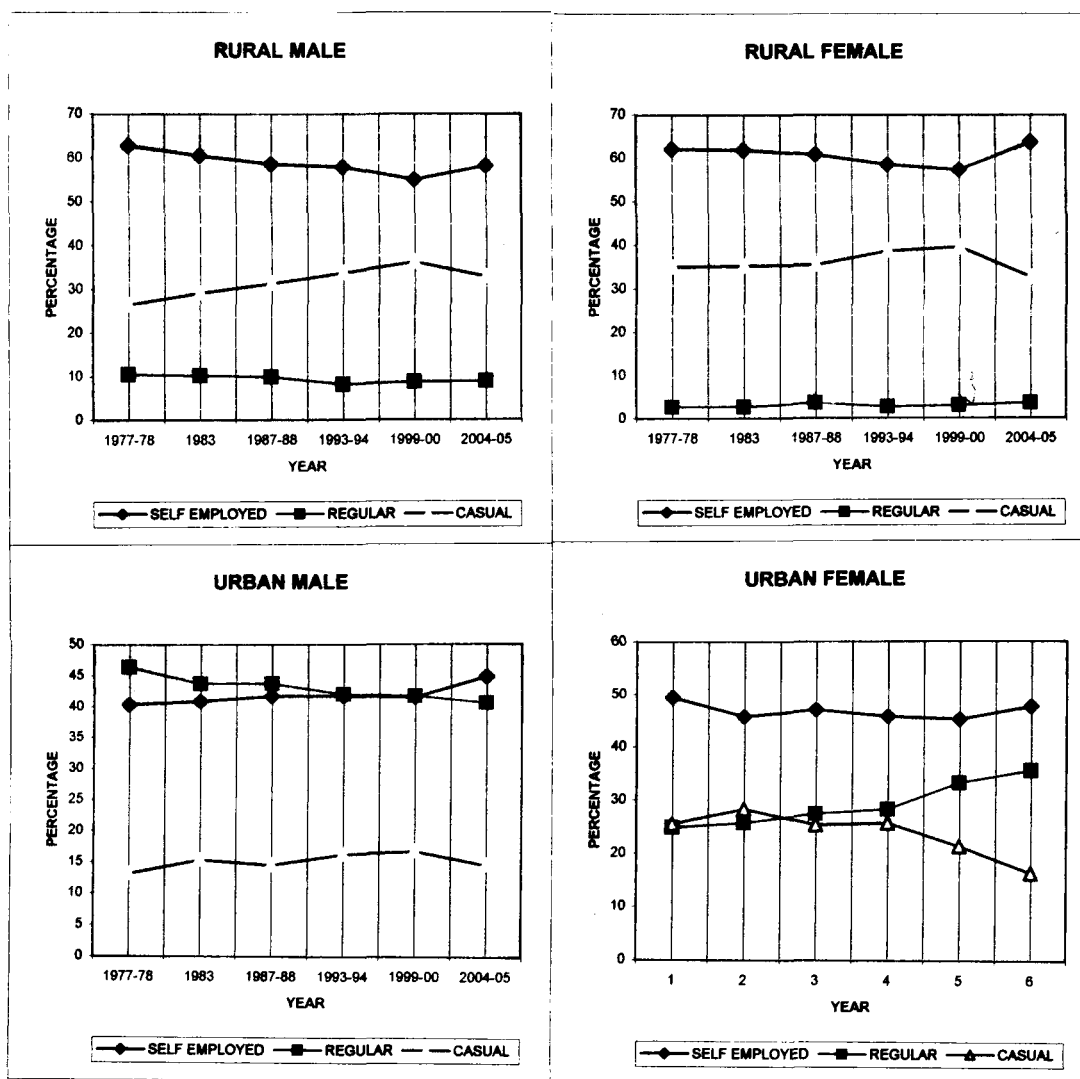
(Percentage)

Year	Rural Male			Rural Female		
	Self Employed	Regular	Casual	Self Employed	Regular	Casual
1977-78	62.8	10.6	26.6	62.1	2.8	35.1
1983	60.5	10.3	29.2	61.9	2.8	35.3
1987-88	58.6	10	31.4	60.8	3.7	35.5
1993-94	57.9	8.3	33.8	58.5	2.8	38.7
1999-00	55	8.8	36.2	57.3	3.1	39.6
2004-05	58.1	9	32.9	63.7	3.7	32.6
Year	Urban Male			Urban Female		
	Self Employed	Regular	Casual	Self Employed	Regular	Casual
1977-78	40.4	46.4	13.2	49.5	24.9	25.6
1983	40.9	43.7	15.4	45.8	25.8	28.4
1987-88	41.7	43.7	14.6	47.1	27.5	25.4
1993-94	41.7	42	16.3	45.8	28.4	25.8
1999-00	41.5	41.7	16.8	45.3	33.3	21.4
2004-05	44.8	40.6	14.6	47.7	35.6	16.4

Source: Government of India, National Sample Survey Organization: Employment and Unemployment Situation in India, Various Issues.

The losers in attaining employment are clearly the rural males. Employment in rural areas is either in self employment or as casual workers as the employment in negligible and that too the fall in regular employment is rather sharp from 1993-94. And from Table 1(b) it is seen than in 2005 these rural males constituted 400865 persons out of the

FIGURE 5 : STATUS OF EMPLOYMENT



total of 1093031, that is approximately 37 percent. The obvious trend that emerges for rural areas, for both males and females is that of a decline in self-employment and increase in casual workers. For urban males there is a decline in regular workers and an increase in self employed and casual workers while the trend in urban females is contrary to it which shows an increase in regular employment.

5 (IV) ECONOMIC REFORMS AND UNEMPLOYMENT RATES:

(i) A Comparison of Alternative Measures of Unemployment:

As per the PS+SS unemployment rates during the period of reforms unemployment increased for all classes except for urban males where it first increased till 1999-00 and then declined thereafter. This trend is the same according to CWS estimates also. But the CDS estimates give some different pictures. According to these estimates the unemployment rates of rural females declined after increasing between 1993-93 and 1999-00. Also the urban male trend is different than other estimates as in this case it kept on increasing after 1993-94. After 1993-94 rural males unemployment as per PS+SS and CWS estimates first increased and then decreased marginally but as per CDS estimates kept on increasing. After 1993-94 urban males unemployment as per PS+SS and CWS estimates first increased and then decreased but as per CDS estimates kept on increasing. After 1993-94 rural females unemployment as per PS+SS and CWS estimates first increased but as per CDS estimates first increased and then decreased. After 1993-94 unemployment rates for

FIGURE 6 : UNEMPLOYMENT RATES

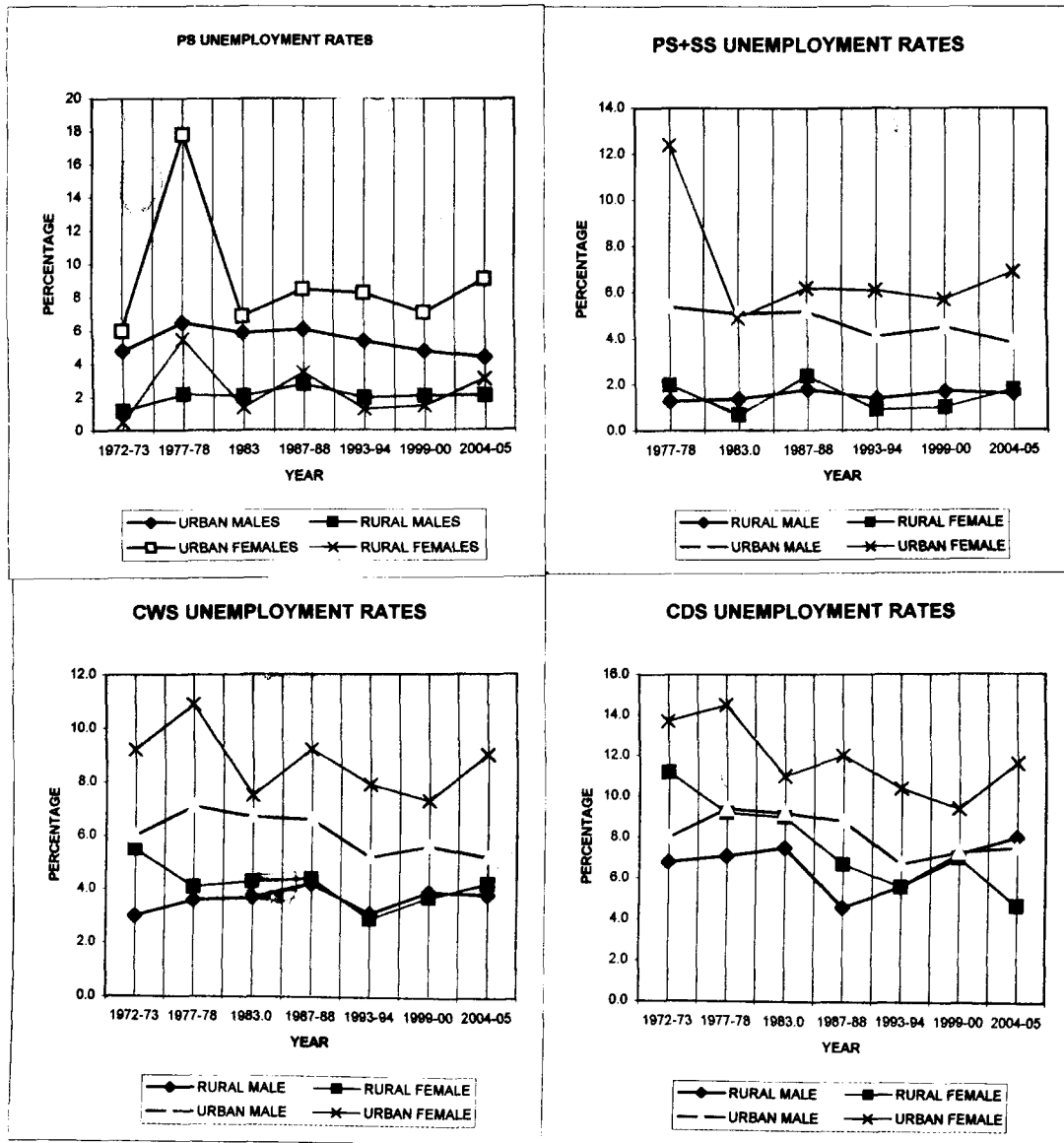
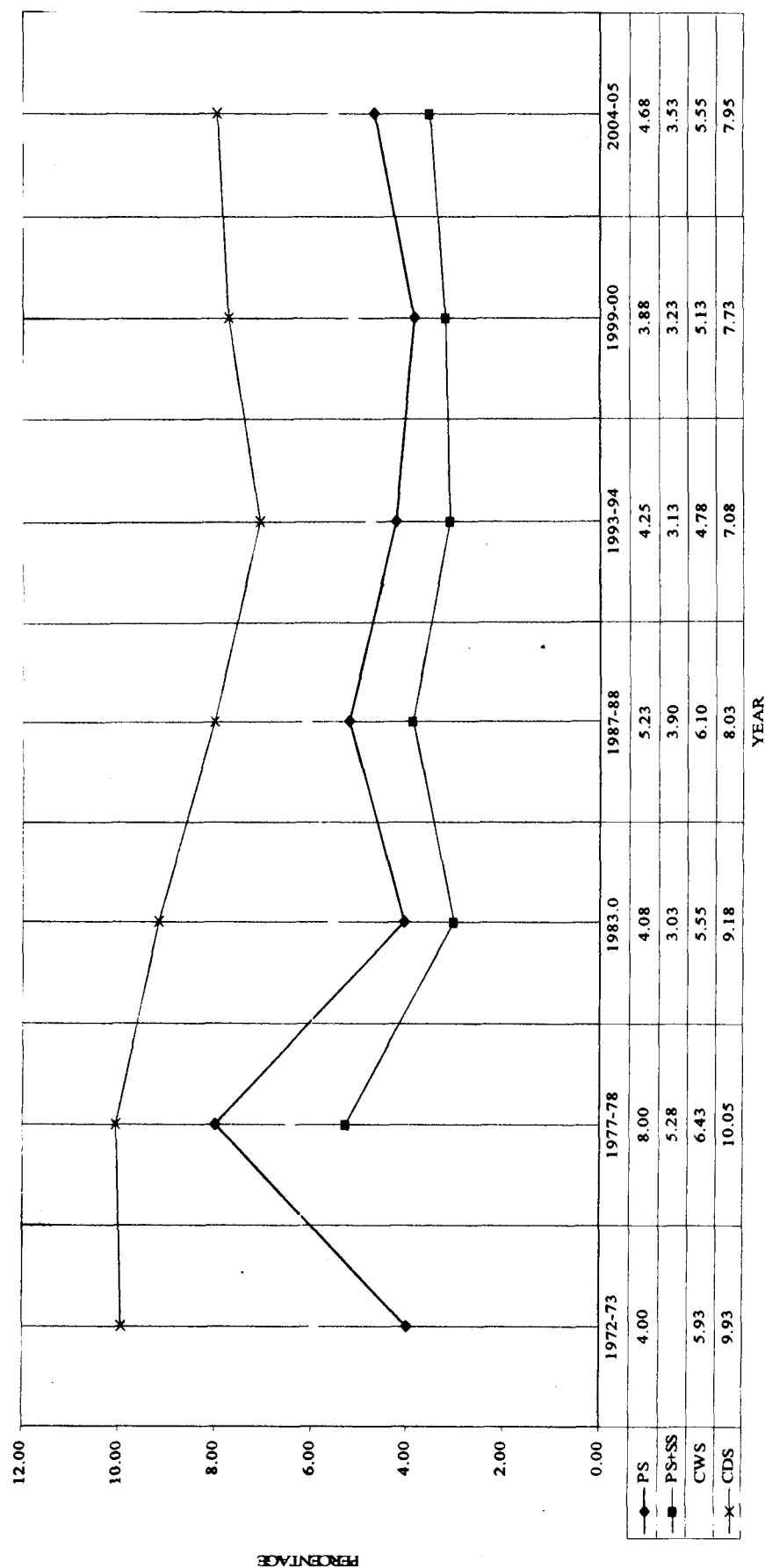


FIGURE 7: AVERAGE UNEMPLOYMENT RATES

AVERAGE UNEMPLOYMENT RATES (RURAL MALE+RURAL FEMALE+URBAN MALE+URBAN FEMALE/4)



urban females as per PS+SS, CWS and also by CDS estimates first decreased and then increased.

Table 6: Unemployment Rates on the Basis of Alternative Measures
(Percentage)

Year	PS Unemployment Rates				PS+SS Unemployment Rates			
	Urban Males	Rural Males	Urban Females	Rural Females	Rural Male	Rural Female	Urban Male	Urban Female
1972-73	4.8	1.2	6.0	0.5				
1977-78	6.5	2.2	17.8	5.5	1.3	2.0	5.4	12.4
1983	5.9	2.1	6.9	1.4	1.4	0.7	5.1	4.9
1987-88	6.1	2.8	8.5	3.5	1.8	2.4	5.2	6.2
1993-94	5.4	2.0	8.3	1.3	1.4	0.9	4.1	6.1
1999-00	4.8	2.1	7.1	1.5	1.7	1.0	4.5	5.7
2004-05	4.4	2.1	9.1	3.1	1.6	1.8	3.8	6.9
Year	CWS Unemployment Rates				CDS Unemployment Rates			
	Rural Male	Rural Female	Urban Male	Urban Female	Rural Male	Rural Female	Urban Male	Urban Female
1972-73	3.0	5.5	6.0	9.2	6.8	11.2	8.0	13.7
1977-78	3.6	4.1	7.1	10.9	7.1	9.2	9.4	14.5
1983	3.7	4.3	6.7	7.5	7.5	9.0	9.2	11.0
1987-88	4.2	4.4	6.6	9.2	4.6	6.7	8.8	12.0
1993-94	3.1	2.9	5.2	7.9	5.6	5.6	6.7	10.4
1999-00	3.9	3.7	5.6	7.3	7.2	7.0	7.3	9.4
2004-05	3.8	4.2	5.2	9.0	8.0	4.7	7.5	11.6

Source: Government of India, National Sample Survey Organization: Employment and Unemployment Situation in India, Various Issues.

If all the classes, that is, rural and urban males and females are added and then an average rate for one particular year is taken, it becomes very evident that all the unemployment rates increased during the period 1993-94 to 2004-05.

(ii) Organised and Unorganised Sector Employment:

Basically the whole Indian economy can be classified into two sectors, namely, organized and unorganized. The organized sector usually refers to employment in the public sector and in the private sector establishment employing 10 or more person. It is commonly

believed that wages in the organized sector are much higher than in the unorganized sector. Moreover the organized sector being regulated also provide greater job security and other benefits within the organized sector, jobs in the public sector receive much higher wages and accompanying benefits then those in the private sector for similar skill. Besides this, public sector offers greater job security.

Table 8: Employment in Organised and Unorganised Sector

Sector	Employment (million)			Growth Rate (% p.a)	
	1983	1994	1999-00	1983-1994	1994-2000
Total Employment	302.75	374.45	397	2.04	0.98
Organized Sector	24.01	27.37	28.11	1.2	0.53
Public Sector	16.46	19.44	19.41	1.52	-0.03
Private Sector	7.55	7.93	8.7	0.45	1.87
Unorganized Sector	278.7	347.08	368.89	2.01	1.02

Source: *Economic Survey, 2001-2002, Economic Division, Ministry of Finance, Government of India.*

In the year 1999-00 out of the total employment of 397 million the organized sector employed only 28.11 million persons while the unorganized sector employed a major chunk of 368.89 million persons. The organized sector employment increased from 24.01 million in 1983 to 28.11 million in 1999-00 but the rate of growth declined from 1.2 between 1983 and 1994 to only 0.53 between 1994 and 2000, which is less than half the growth in the previous time period. Moreover whatever growth is there is only in the private sector as in the public sector the per annum percentage growth was negative (-0.03). As against the growth of 0.58 percent per annum in organised sector during 1994 and 2000 the

growth in the unorganized sector in the same period was of the magnitudes of 1.02 percent.

If the whole period between 1983 and 2004 is taken the situation doesn't show any improvement. The overall growth rate of employment between 1983 and 1994 was 1.2 percent and this growth rate declined and turned negative to the tune of -0.38 in the time period between 1994 and 2004. The situation is grimmer in the public sector where the growth rate in the latter period was negative.

Table 9: Annual Percentage Growth Rate of Employment
(Percentage)

Sector	1983-1994	1994-2004
Public Sector	1.53	-0.8
Private Sector	0.44	0.61
Organized Sector	1.2	-0.38

Source: *Economic Survey, 2006-2007, Economic Division, Ministry of Finance, Government of India.*

A further detailed analysis of industry wise contribution to employment generation adds to the gloomy picture on employment generation. In the public sector there was a negative growth in agriculture, manufacturing, electricity gas and water, construction, transport, storage and communications. The industry with the highest growth was wholesale and retail trade. In the private sector except mining & quarrying and construction all other sectors showed an increase in the number of employed persons. The magnitude of increase was the highest in Community, Social and Personal services but what is worrying is the low growth in agriculture and manufacturing.

Table 10: Employment by Industry

(Percentage)

Sector	Public Sector			Private Sector		
	2004	1991	(i) - (ii)	2004	1991	(iv) - (v)
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Agriculture, Hunting etc.	4.93	5.56	-0.63	9.17	8.91	0.26
Mining & Quarrying	10.3	9.99	0.31	0.65	1	-0.35
Manufacturing	11.89	18.52	-6.63	44.89	44.81	0.08
Electricity, Gas & Water	8.74	9.05	-0.31	0.47	0.4	0.07
Construction	9.32	11.49	-2.17	0.45	0.73	-0.28
Wholesale & Retail Trade	10.81	1.5	9.31	3.51	3	0.51
Transport, Storage & Communications	28.15	30.26	-2.11	0.81	0.53	0.28
Finance, Insurance & Real Estate	14.08	7.48	6.6	4.58	2.54	2.04
Community, Social & Personal Services	92.76	92.27	0.49	17.92	11.45	6.47
Total	181.97	190.58	-8.61	82.46	76.77	5.69

Source: Economic Survey, 2006-2007, Economic Division, Ministry of Finance, Government of India

(iii) A Study of Employment Elasticities:

A study of the employment elasticity gives a grim picture of the worsening situation with the employment elasticity for the overall economy declining from 0.52 for the period 1983 to 1993-94 to only 0.16 for the period 1993-94 to 1999-00. Employment elasticity gives the ratio between the increases in employment associated with the increase in national income. Higher the elasticity, more favorable it is for the economy in terms of employment generation as in that case more people would be engaged in employment with the increase in output. As is evident from Table-11, the elasticities turned negative in the nineties for mining and quarrying, electricity gas and water supply and also for community, social and personal services, but the most worrying factor in the reduction in the agricultural employment elasticity from 0.70 in the period 1983 to 1993-94 to 0.01 in the period 1993-94 to 1999-00.

Table 11: Employment Elasticities

Sector	(Percentage)	
	1983 to 1993-94	1993-94 to 1999-00
Agriculture	0.7	0.01
Mining and Quarrying	0.59	-0.41
Manufacturing	0.38	0.33
Construction	0.86	0.82
Electricity, Gas and water supply	0.63	-0.52
Trade Hotels & Restaurants	0.68	0.62
Transport, Storage and communication	0.55	0.63
Financing, Real Estate and Insurance and Business Service	0.45	0.64
Community, Social and Personal Services	0.68	-0.25
All sectors	0.52	0.16

Source: Tenth Five Year Plan 2002-07, Planning Commission, Government of India, Volume 1.

(iv) A Study of Inter-State Variations in Unemployment Rates:

Another perspective of looking at the unemployment scenario is to look at the variation in the unemployment rates between different states. The data of 17 major states of the country pertaining to unemployment rates has been presented in Table-12. The states are arranged in decreasing order of prevalence of unemployment. Here the CDS unemployment rates have been taken. Although during 1999-00, the All-India unemployment rate was 7.29%, states show very wide variations from about 3% in Himachal Pradesh and Rajasthan to about 12% in T.N. and 15% in West Bengal and about 21% in Kerala. It is rather intriguing that a state like Kerela, which has shown the sharpest decline in poverty should also show the highest rate of unemployment and if the situation in 1999-00 is compared with the situation in 1993-94 it could be seen that barring the states of Haryana, Gujrat and Karnataka all the other states showed an worsening of the situation

Table 12: A Study of Inter-State Variations in CDS Unemployment Rates
(Percentage)

S.No	States	1987-88	1993-94	1999-00	(i) - (ii)	(ii) - (iii)
		(i)	(ii)	(iii)	(iv)	(v)
1	Kerela	21.19	15.5	20.77	5.69	-5.27
2	West Bengal	8.13	9.87	14.95	-1.74	-5.08
3	Tamil Nadu	10.36	11.44	12.05	-1.08	-0.61
4	Assam	50.9	7.96	8.00	42.94	-0.04
5	Andhra Pradesh	7.35	6.67	7.94	0.68	-1.27
6	Orissa	6.44	7.28	7.34	-0.84	-0.06
7	Bihar	4.04	6.25	7.35	-2.21	-1.10
8	Maharashtra	4.67	4.97	7.07	-0.30	-2.10
9	Haryana	7.59	6.59	4.67	1.00	1.92
10	Gujarat	5.79	5.73	4.63	0.06	1.10
11	Karnataka	5.06	4.89	4.61	0.17	0.28
12	Madhya Pradesh	2.86	3.42	4.6	-0.56	-1.18
13	Delhi	4.77	1.91	4.58	2.86	-2.67
14	Uttar Pradesh	3.44	3.45	4.27	-0.01	-0.82
15	Punjab	5.07	3.08	4.15	1.99	-1.07
16	Rajasthan	5.74	1.33	3.06	4.41	-1.73
17	Himachal Pradesh	3.12	1.82	2.93	1.3	-1.11
	All India	6.09	6.03	7.29	0.03	-1.26

Source: National Sample Survey Organization: Employment and Unemployment Situation in India, Government of India, Various Issues.

The above analysis was till the years 1999-00. The CDS data for the period after 1999-00 is not available yet. Hence, the situation from 1999-00 to 2004-05 can be analyzed by the youth unemployment rates for these two years as per the Usual Status rates. It is evident from Table-13 that unemployment rates have increased for Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerela, Orrissa, Punjab, Rajasthan, Tripura, Andaman & Nicobar Islands, Chandigarh, Dadar & Nagar Haveli, Lakshadweep and Pondicherry. This can be said in other words that, in more than half of India's states/UTs, unemployment has increased.

Table 13: State-Wise Estimate of Unemployment Rate for Youth (15 to 29 years) as per Usual Status Approach

(Percentage)							
State/UT	1999-00	2004-05		State/UT	1999-00	2004-05	
	(i)	(ii)	(i)-(ii)		(iv)	(v)	(iv)-(v)
Andhra Pradesh	5.45	5.25	0.20	Mizoram	4.98	2.98	2.00
Arunachal Pradesh	7.58	4.38	3.20	Nagaland	16.23	12.25	3.98
Assam	19.38	13.68	5.70	Orissa	11.33	23.60	-12.28
Bihar	11.33	10.83	0.50	Punjab	4.98	14.30	-9.33
Chhattisgarh		3.98		Rajasthan	3.53	3.63	-0.10
Delhi	19.90	8.08	11.83	Sikkim	14.78	6.15	8.63
Goa	34.83	22.53	12.30	Tamilnadu	7.85	6.38	1.48
Gujarat	3.00	3.40	-0.40	Tripura	13.43	52.03	-38.60
Haryana	3.23	8.80	-5.58	Uttanchal		8.78	
Himachal Pradesh	11.30	11.38	-0.07	Uttar Pradesh	5.65	4.40	1.25
Jammu & Kashmir	10.08	10.85	-0.78	West Bengal	12.53	9.78	2.75
Jharkhand		8.65		A & N Islands	14.55	20.83	-6.28
Karnataka	4.45	5.13	-0.68	Chandigarh	9.35	22.40	-13.05
Kerala	27.33	35.23	-7.90	D & N Haveli	1.83	8.70	-6.88
Madhya Pradesh	3.95	3.58	0.38	Daman & Diu	3.83	1.78	2.05
Maharashtra	9.13	5.60	3.53	Lakshadweep	40.55	41.40	-0.85
Manipur	11.08	9.68	1.40	Pondicherry	10.08	23.00	-12.93
Meghalaya	7.85	5.88	1.98	All India	7.93	7.95	-0.02

Source : *Rajya Sabha Unstarred Question No. 2375, dated 13.12.2005 cited in www.indiastat.com.*

5 (V) THE RELATIONSHIP BETWEEN GROWTH AND EMPLOYMENT:

The trickle-down hypothesis and the talks of spread effects and the percolation of benefits of growth to the lowest segment implies that growth that is all important and is the panacea for all ills. That is, a higher growth will rather automatically lead to, among all other things, an increase in employment. It was felt that if India needs to develop and catch up with other advanced economies then it must go for economic reforms, that is, the basic motive of these reforms was economic growth, along with the idea that “Economic reforms in the areas of abolishing quantitative restrictions, reducing tariffs, reforming labor laws and

abolishing SSI reservations have aimed at fostering labor-intensive production in India” 6. In this section a relationship is sought to be established between GDP growth and reduction in unemployment by using a Karl Pearson’s correlation method. Here unemployment estimates based on principal status and subsidiary status is taken for the years for which the quinquennial round of EUS surveys were done by NSSO and for GDP estimates the GDP data at factor cost for approximately the same period is taken from the Economic Survey.

(i) Correlation between GDP Growth and Unemployment Rates (Principal Status and Subsidiary Status)

(a) Rural males:

Table 14: GDP and Rural Males Unemployment Rates

Year	UR (PS+SS)	GDP
	X	Y
1977-98	1.3	374235
1983	1.4	471742
1987-88	1.8	556778
1993-94	1.4	781345
1999-00	1.7	1148367

Correlation coefficient

(r) = 0.426.

(Appendix-11)

Source: Economic Survey, 2006-2007, Economic Division, Ministry of Finance, Government of India.

National Sample Survey Organization: Employment and Unemployment Situation in India, Government of India, Various Issues.

The calculation shows that there is a positive correlation between GDP growth and unemployment rates on principal status and subsidiary status basis for rural males, that is, unemployment of the rural males has increased as the GDP increased. This is indeed a matter of serious concern. Although it can be argued that correlation does not say that, one variable is the cause and other is the effect, that is, an increase in

GDP is leading to an increase in unemployment, but it obviously points to the fact that the growth process is not taking care of the unemployment problem.

(b) Rural females:

Table 15: GDP and Rural Females Unemployment Rates

Year	UR (PS+SS)	GDP
	X	Y
1977-98	2	374235
1983	0.7	471742
1987-88	2.4	556778
1993-94	0.9	781345
1999-00	1	1148367

Correlation coefficient

(r) = - 0.072.

(Appendix-12)

Source: Same as Table 14.

The calculation shows a negative correlation between GDP growth and unemployment rates on principal status and subsidiary status basis for rural females, that is, for rural females unemployment has decreased as the GDP increased.

(c) Urban males:

Table 16: GDP and Urban Males Unemployment Rates

Year	UR (PS+SS)	GDP
	X	Y
1977-98	5.4	374235
1983	5.1	471742
1987-88	5.2	556778
1993-94	4.1	781345
1999-00	4.5	1148367

Correlation coefficient

(r) = -0.871.

(Appendix-12)

Source: Same as Table 14.

The calculation shows that there is a negative correlation between GDP growth and unemployment rates on principal status and subsidiary

status basis for urban males, that is, unemployment of the urban males has decreased as the GDP increased.

(d) Urban Females:

Table 17: GDP and Urban Females Unemployment Rates

Year	UR (PS+SS)	GDP
	X	Y
1977-98	12.4	374235
1983	4.9	471742
1987-88	6.2	556778
1993-94	6.1	781345

Correlation coefficient

(r) = -0.318.

(Appendix-12)

Source: Same as Table 14.

The calculation shows that there is a negative correlation between GDP growth and unemployment rates on principal status and subsidiary status basis for urban females, that is, unemployment of the urban females has decreased as the GDP increased.

From the above analysis it is evident that unemployment has decreased with the growth in GDP for urban males, urban females and rural females. But the unemployment has increased for rural males which as per Sundaram's⁷ estimates constitute of a huge 400865 thousand people as on 1.1.2005, that is, 36 percent of the total of 1093031 thousand persons on the same date.

Finally it can be summarized as, "historically transformation of less developed economies into developed ones consisted in shifting workforce from employment in lower productivity primary activities to higher productivity secondary and tertiary sectors. Viewed from this perspective, Indian development strategy has thus far been

disappointing. Despite the fact that recent rapid growth has been led by rapid growth of the service sector rather than manufacturing, any expectation that India can leap-frog the stage of manufacturing growth and shift less educated and unskilled workers employed in agriculture and other primary activities with lower productivity to employment in high productive service activities is extremely unrealistic”.⁸

It was generally presumed that there is a positive association between growth and employment generation and the reforms of 1990s and its related components would, among other things, lead to a reduction in unemployment. But the performances of India on the employment front between 1993 and 2005, which can be conveniently taken as the post reform period, show that altogether these reforms led to the worsening of the employment patterns. Also from the above correlation analysis it could be seen that with the increase in GDP, the long term unemployment as measured by UPS increased rather than declining and this pattern continued even after the reforms of 1990s and its subsequent increase in GDP. Although the CWS and CDS rates declined with the increase in GDP it can be argued that a high rate of economic growth is a necessary, but not a sufficient condition to solve the unemployment problem particularly for a country like India where the employment elasticity is quite low due to which economic growth provide only a partial solution to the unemployment problem in India as economic growth by itself cannot solve the unemployment problem and

the government policy which gives overriding priority to economic growth would add to unemployment backlog rather than reducing it.

5 (VI) POVERTY AND UNEMPLOYMENT ALLEVIATION PROGRAMMES IN REFORM PERIOD:

For the purpose of poverty alleviation several special programmes for employment generation are being implemented both in rural and urban areas during the reform period. These programmes provide employment to targeted poor, enhance their income and generate assets to poor families. There are following major programmes which have been adopted during the reform period.

(i) Employment Assurance Scheme (EAS):

The EAS was started from 2nd October 1993 in 1778 development blocks in the rural areas of 261 districts. The main objective of this scheme is to provide profitable employment of not less than 100 days to every willing villager of age between 18 years and 60 years during the lean agricultural season. Also, to create economic infrastructure and community projects for creating sufficient employment and development activities. EAS is a demand driven programme.

(ii) Prime Minister's Rozgar Yojana (PMRY):

PMRY was also introduced on 2nd October 1993. Under this scheme every selected educated unemployed youth in the age group of 18-40 years and having family income below Rs. 40,000 is provided a loan of upto Rs. 1 lakh for opening his own enterprise and Rs. 2 lakh on

other activities. During 1993 –94, this scheme was implemented only in urban areas but since April 1994 it is being implemented both in urban and rural areas.

(iii) National Social Assistance Programme (NSAP):

The NSAP was launched in August 1995. It has three components

- National Old Age Pension Scheme (NOAPS);
- National Family Benefit Scheme (NFBS); and
- National Maternity Benefit Scheme (NMBS).

The NSAP is a centrally-sponsored programme that aims at ensuring a minimum national standard of social assistance over and above the assistance that states provide from their own resources. The NOAPS provides a monthly pension of Rs. 75 to destitute BPL persons above the age of 65. The NFBS is a scheme for BPL families who are given Rs. 10,000 in the event of the death of the breadwinner. The NMBS provides Rs. 500 to support nutritional intake for pregnant women.

(iv) Swarnajayanti Shahri Rozgar Yojana (SJSRY):

SJSRY is operational since December 1997. This scheme provides gainful employment to the urban unemployed and underemployed poor through encouraging the setting up of self-employment ventures or provisions of wage employment.

(v) Swarnajayanti Gram Swarozgar Yojana (SGSY):

SGSY was launched in April 1999 after restructuring of the erstwhile IRDP and allied schemes. It is the only self-employment

programme currently being implemented. It is conceived as a holistic programme of micro enterprises covering all aspects of self-employment. Its objective is to bring the assisted 'swarozgaris' above the poverty line by providing them income-generating assets through bank credit and Government subsidy. Since its inception, and up to April 2004, a total allocation of Rs. 6734 crore was made available by the centre and states. Out of this Rs. 4980 crore have been utilized upto April 2004, hence benefiting 45.67 lakh Swarozgaris. However, SGSY is funded by the centre and states in the ratio of 75:25.

(vi) Pradhan Mantri Gramodaya Yojana (PMGY):

PMGY was launched in 2000-01 in all states and union territories in order to achieve the objective of sustainable human development at village level. PMGY initially had five components viz. primary health, primary education, rural shelter, rural drinking water and nutrition. Rural electrification was added as an additional component from 2001-02. Both financial and physical monitoring of this programme is being carried out by the Planning Commission.

(vii) Antyodaya Anna Yojana (AAY):

AAY was launched in 2000. The scheme aims at providing food security to poor families. Under the scheme 1 crore of the poorest among the BPL families covered under the targeted PDS are identified and 25 Kgs of foodgrains were made available to each eligible families at a highly subsidised rate of Rs. 2 per kg for wheat and Rs. 3 per kg for rice. The

quantity has been enhanced from 25 to 35 kg with effect from April, 2000. The scheme has been further expanded in June 2003 by adding another 50 lakh BPL families.

(viii) Pradhan Mantri Gram Sadak Yojana (PMGSY):

The PMGSY was launched in December 2000 to provide road connectivity to 1.6 lakh unconnected habitations with population of 500 persons or more in the rural areas by the end of Tenth Plan period. It is being executed in all the states and UTs.

(ix) Valmiki Ambedkar Awas Yojana (VAMBAY):

The VAMBAY was launched in December 2001 to ameliorate the conditions of the urban slum dwellers living below the poverty line without adequate shelter. The scheme has the primary objective of facilitating the construction and upgradation of dwelling units for slum dwellers and providing a healthy and enabling urban environment.

(x) Sampoorna Grameen Rozgar Yojana (SGRY):

SGRY was launched in September 2001, by merging the ongoing schemes of Jawahar Gram Samridhi Yojana (JGSY) and Employment Assurance Scheme (EAS). The objective of this programme is to provide additional wage employment in the rural areas as also food security, along with the creation of durable community, social and economic infrastructure in rural areas. This programme is open to all rural poor who are in the need of wage employment and desire to do manual and unskilled work in and around the village. The scheme is implemented

through Panchayati Raj Institutions. The scheme envisages generation of 100 crore man-days of employment in a year.

At present the Government of India has several programmes and schemes to reduce urban as well as rural poverty. Old schemes are reviewed, new schemes are implemented and new strategies are being evolved to accelerate growth and reduce poverty.

(xi) Bharat Nirman Yojna:

A major plan to rebuild rural India was launched in the Union Budget for 2005-06. This is unique in the sense that for it is for the first time a time bound business plan has been launched for rebuilding roads, housing, water supply and electrification and telecommunication connectivity. To make rural India realize its potential, Bharat Nirman would be the platform to provide urban facilities in rural areas. It is to be implemented over a period of four years for building rural infrastructure. Bold physical goals have been set for the six areas outlined in the programme. The goals are-

- (a) To bring an additional one crore hectares under assured irrigation
- (b) To connect all villages those have a population of 1000 or 500 in hilly/tribal areas with a road.
- (c) To construct 60 lakh additional houses for the poor.
- (d) To provide drinking water to the remaining 74,000 habitations those are uncovered.

(e) To reach electricity to the remaining 1, 25,000 villages and offer electricity connection to 2.3 crore households.

(f) To give telephone connectivity to the remaining 66,822 villages.

The government believes that Bharat Nilman is an achievable project and its intention to give rural India a new deal fully involving the Panchayat Raj institutions in the planning and implementation. The general complaint in implementation of rural development is wide-spread leakage of revenue and involvement of local bodies will definitely go a long way in providing more accountability.

(xii) National Rural Employment Guarantee Scheme (NREGS):

With the passing of the National Rural Employment (NREG) Act in September, 2005, the NREGS was implemented from February 2, 2005. It concentrates on works related to rural connectivity through all weather roads, flood control, land development, drought averting measures, water conservations etc. The new employment guarantee scheme provides an indispensable opportunity to the millions of poor in the rural areas of the country. This social security measure for the first time makes the right to work a fundamental and legal right which is a totally new and radical deal for India's poor. It will give bargaining powers to the poorest of the poor and help those belonging to the SC, ST, landless class and woman. Village panchayats would play a pivotal role in the implementation of NREGS and money would not be a constraint in accomplishing it. Initially, the scheme would be implemented in 200 districts across the

country, which would be extended to 600 districts. One third of the proposed jobs would be reserved for women. The centre has taken responsibility of providing financial assistance to the scheme and the states only had to implement it. The minimum wage as applicable in various states under the Minimum Wages Act 1948 would apply to the programmes. However, the centre would step in to ensure a minimum rate of not less than Rs.60 a day in states, where it was lower. The bill also provides for unemployment allowance if the jobs under the scheme, is not provided within a specified period. This ambitious programmes seeks to ensure at least 100 days wage employment to every rural household in a year in 200 districts to began with.

(xiii) Republic Day Presidential Address (2005):

Regarding effective employment generation the Presidential address on the Republic Day (2005) eve is of utmost significance. The then President, Dr. A.P.J.Abdul Kalam unveiled a development oriented agenda to the nation saying that the focus should be on employment generation. The President has called for finding gainful employment for around 76 million people over the next five years so that India becomes a developed country by 2020. He devoted his entire customary address to the theme of employment. He wanted a series of mission to be landed in various areas including agriculture, education, health care and infrastructure development and said that this could take the growth rate to 10%. He underlined the employment potential rate to 10%. He

underlined the employment potential in areas such as bio-fuel generation, wasteland development, water harvesting and recycling, bamboo plantation and converting fly ash as a wealth generator, textile industry, health care and village knowledge centers. Having identified the areas of possible employment generation, the President discussed the role of different constituents of our society in implementing various programmes leading to creation of employment opportunities and wealth generation. These are:

(a) The education system should proactively build entrepreneurial and vocational capacities in students so that they start small enterprises after graduation.

(b) Rural development has to be a mission mode operation through the PURA programme (Providing Urban Amenities in Rural Areas) which will enable the provision of maximum benefits to villages in a cost effective way.

(c) Banks should provide easy access to credit and loans to rural enterprises and those who have created-ideas. In particular, agriculture and related credits should increase.

(d) In the post-tsunami reconstruction, it is important to take the task as an integrated PURA complex for promoting the prosperity of the coastal region. This could include infrastructure for fish storage and chilling plants, seafood processing and marketing centers, boat and fishing net maintenance centers etc.

In particular, the President emphasized the importance of PURA to avoid migration from the rural areas to the urban areas. Pointing out that the percentage of people employed in agriculture had come down from 64 to 54 between 1979 and 2004, Mr. Kalam said that the displacement of 10% people from agriculture sector has to be facilitated through skilled enabling for undertaking value added tasks in rural enterprises so that migration to the urban areas is reduced.

(e) Building on the successful experience of "mission mode projects" in the field of defence, space, nuclear, agriculture and metro railway, major programmes of the country should use this mission mode management for employment generation schemes.

(f) Given the broadband fiber connectivity this is the time for all our information technology, R&D and industrial establishments to reach out to rural areas.

(g) Technological upgradation in small scale industries.

(h) The media should reach out to the six hundred thousand villages of the country and be active partners in rural development.

(i) The youth have to create a movement of making their own homes right over, making their environment clean and excel in their studies and tasks.

(j) The national parliamentary system should become the role model for the nations in legislative performance, in clean and progressive administration, nobility and speedy judiciary.

(xiv) Right to Information Act, 2005:

A recent study by Planning Commission reported in March 2005, claimed that due to identification errors, non-transparent operations and unethical practices in the implementation of TDPS, 58 percent of the subsidized food grains from the Central pool did not reach the BPL families. On the basis of this study Mukhopadhyay says that, “ The trouble with charitable anti-poverty programs of the State is that in conditions of social inequality, corruption converts them effortlessly into political slush funds.....Anti-poverty measures as mere assurances without guarantees that workers in the unorganized sector can invoke only financial ruinous, but politically pernicious as well. It has been gnawing at our system of electing political representatives by enabling offices of profit to become the means for a candidate fighting elections to recoup his illegal expenses or those incurred on his behalf by cronies and supporters.”⁸

The RTI could come up as a viable solution to the above problem. The RTI is a comprehensive legislation that would confer statutory rights on citizens for seeking information from public authorities. The Government of India enacted the National Right to information Act 2005 in June 2005 and it came fully into force on 12th October 2005. The RTI Act 2005 covers all central, state and local government bodies and, in addition to the executive, it also applies to the judiciary and the legislature. It covers all bodies owned, controlled or substantially

financed, either directly or indirectly by the government, and non-governmental organizations. It also covers the private sector as it provides the citizens access to all information that the government can access through any other law currently in force.

The Act gives a detailed definition of the term 'information' and significantly includes 'opinions and advice' as subject to disclosure. This means that file noting are also to be disclosed. It also includes the right to inspect work, documents and records held by the government, and allows for the extraction of certified samples for verification. Therefore, the Act moves beyond the realm of files and documents and enables the public to get knowledge of the field reality.

The Act has set out a relatively simple process for accessing information. Each public authority must appoint a Public Information Officer (PIO), who accepts requisitions and provides information. The PIO must ordinarily respond to the requisition within 30 days, but extensions are allowed in some cases. Information relating to the life or liberty of a person must, nevertheless, be provided in 48 hours. Nevertheless the Act exempts certain categories of information from disclosure and stipulates penalties for PIOs found to be in violation of the Act.

The important thing is that that the Act provides provisions to ensure that all categories of the people, especially the rural and urban poor, can access information. The Act specifies that fees would be reasonable, and must be waived for persons below the poverty line

The RTI Act, if effectively implemented, would change the nature of governance of India. It could start a process of transparent and inclusive governance that could gradually shift the Indian democracy from being almost totally a representative one to a vigorously participatory one. It would bring a sense of empowerment to the citizens of this country which is necessary to check the degradation of government's performance, with special reference to the social development programs and is expected to bring in a new era of governance by promoting more transparency and accountability.

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CHAPTER-VI

CONCLUSION

CONCLUSION

A rapid rate of growth may be achieved by opening up of the economy to integrate it with the world economy, privatizing it to let the market forces decide resource allocation and factor incomes, exercising fiscal prudence by raising more revenues, cutting down inessential expenditure, reducing fiscal deficit and setting up independent regulators to oversee the functioning of the market in different spheres to ensure fair competition. But such a strategy may not alone necessarily result in commensurate human development. A parallel approach and set of measures may need to be adopted for promoting human development and reducing poverty and unemployment. Hence the obsession with GDP growth rate has to go.

GDP growth rate is essentially a function of investment and productivity, which depends prominently on the technology used. But for human development we need larger investments in areas where most of the poor, illiterate, ill-fed, ill-housed, ill-treated, unemployed, underemployed and exploited people are living and working and the use of labor intensive technologies which provide them gainful employment and increase their productivity in the vocations in which they are engaged.

If higher GDP is generated by investment made mostly in ventures located away from areas where the poor are concentrated for producing goods and services of no relevance to the poor by using capital intensive

technologies which use more of scarce capital and economize on the use of labor thereby causing a net reduction in employment even in areas where such investments are made, and it would neither promote human development nor reduce poverty and unemployment.

Rapid GDP growth does not automatically translate itself into poverty reduction and employment generation or human development. GDP growth is not an end in itself but only a means of promoting human welfare. It is not so much the rate as the pattern and distribution of GDP growth, and the nature of the technology used, which determine the extent to which it would translate into income for the poor and jobs for the unemployed.

6 (I) OBSERVATIONS OF THE STUDY:

The growth pattern in India after 1991 has been such that the share of agriculture has been declining. Between the period 1991 and 2005, there had been four years when the primary sector growth was negative and another three years when the growth was less than even one percent. Alagh (2006)¹ and Tripathy (2006)² are of the view that without proper agricultural growth there cannot be any inclusive and sustained growth. This poor growth is the reason why rural poverty fared badly after 1991. If we take the period from 1973 to 1993-94 as pre-reform period and the period from 1993-94 to 2004-05 as post-reform period, we can say that reforms had no positive impact on poverty reduction, rather the decline in the rate of poverty reduction has been

slower during the reforms period. The annual average decline in rural poverty between 1973 to 1993-94 was 0.95% while the same figures for the period 1993-94 to 2004-05 was lower at 0.81%. This brings the fact that the decrease in the share of primary sector in overall GDP is not primarily because other sectors have outperformed but because this very sector has fared badly. Interestingly the first generation reforms didn't say anything about the agricultural sector. The policy makers were so much concerned with other things that they rather neglected agriculture. This was the basic flaw in the reform process as Stiglitz (2002)³ talks about keeping the strategies and priorities right and what is off and what is on the agenda. Markets are driven purely by profit motive and it cannot be expected of the market that it would take care of each and every thing which in Sen(1995)⁴ view is that market does something and abstains from others.

Despite the reforms and the changes in the industrial policies as Mishra and Prusty (2001)⁵ had observed the secondary sector growth was not very impressive. The growth rate in nineties was lower at 5.75% than that of 6.98% in eighties. Ideally the sectoral contribution of industrial growth should increase but in India's case the situation is quite opposite. The sectoral contribution of industries declined from 38% in the eighties to around 28% in the nineties and further declined to 27.65 in 2006-07.

Obviously when the contributions of agricultural and industrial sector contribution have decreased then the gap has to be filled by the service sector. As Joshi (2004)⁶ has also observed that there has been a growing tertiarisation of the Indian economy but the problem is that there are fears that without a strong industrial growth, this growth in the service sector will not be sustainable. Agreed that service sector growth has been impressive at more than 7%, but the over dependence on this sector which is now contributing more than fifty percent to the GDP is structurally flawed as it is not that the service sector has outperformed itself rather the other two sectors have under performed.

Thus with the policy changes during nineties there have been improvements but along a rider that all segments of the economy have not equally benefited. Datt and Sundharam (2001)⁷, Parikh and Radhakrishna (2004)⁸ and Sury, Mathur, Bhasin (2006)⁹ have also towed the same line. When we compare the share of states in aggregate net state domestic product (%) ten years before the reforms and ten years after the reforms, then we find that there are three category of states: first which showed improvement in their ranks, second who maintained their ranks and third which experienced a worsening of their ranks, namely Bihar, Haryana, Madhya Pradesh, Manipur, Punjab and Tripura.

The states like Bihar (which includes Jharkhand) and Madhya Pradesh (which includes Chattisgarh) were some of the top performers in increasing their per capita net state domestic product are still having

poverty rate of around 40 percent. India's performance in terms of reducing poverty had been mixed with a slower rate of reduction of rural poverty and poor performance of some states. Jha and Sharma (2003)¹⁰, Sundaram and Tendulkar (2003)¹¹, Radhakrishna, Rao, Ravi and Reddy (2004)¹² and Parikh and Radhakrishna (2004)¹³ all have expressed this very view. One fourth of the total population is still below the poverty line and that too there are states that have more than 40 percent of their population below poverty line. More than 70 percent of the total poor are concentrated in the rural areas. Only six states, viz. Bihar, Madhya Pradesh, Orissa, Jharkhand, Chattisgarh and Uttarakhand contribute more than 40% to the total poverty.

Mitra (2002)¹⁴, Sankaran (2006)¹⁵, Datt and Sundharam (2001)¹⁶ and Misra and Puri (2004)¹⁷ all are of the view that the employment situation has worsened during the nineties. The unemployment rates as per usual status unemployment rate has increased from 2.62 in 1993-94 to 3.06 in 2004-05. The public sector growth rate was negative in the nineties. On an average when the decade of nineties is compared to that of eighties we find that in the nineties the employment elasticities were lower and that except for few states the employment situation worsened for a majority of the states.

There is a huge difference between the constituents of growth and development. Gupta (2001)¹⁸, Todaro (1997)¹⁹, Thirwall (1999)²⁰ all have brought out the difference between growth and development. If the

difference between the two is to be said in one line then it could be said that growth is least concerned with poverty, unemployment and development. In this study we see that GDP at factor cost has more than doubled between the period 1993-94 to 2004-05 from Rs. 781345 crores to Rs.1529408 crores but in terms of poverty and unemployment the situation has not improved much, Dwivedi (2005)²¹, Luthra (2005)²² and Maura (2004)²³ are of the same view which this study holds, that is, no doubt there has been an increase in India's economic growth after 1991, due to the reforms but this growth has not percolated to the poor and the unemployed and the correlation between growth – poverty and growth – unemployment is weak and this type of non inclusive growth is no key to economic development.

It is true that there are problems with the Indian economy, as the social sector particularly poverty and unemployment, which can be attributed to the ongoing process of privatization, liberalization and globalization, but this is where the role of government comes into play. If markets are not benefiting the poor and the unemployed, structurally it is neither wrong nor unexpected of markets as it works purely on profit motive. Moreover, it is not that India has voluntarily adopted for the privatization, liberalization and globalization; rather the bad performance of our economy prior to nineties have led India to a position that it had to call for help from World Bank, International Monetary Fund and developed nations which coerced India to tow the line of Washington

Consensus. The debate of reforms or no reforms is not relevant now. Whether India likes it or not, it can neither revert back the process of reforms nor stop it. The onus is now unto India to mould the nature of reforms and the growth process so as to make the growth process not only sustainable but also inclusive. And the phrase that the onus is with India means that the government will have to work for it. The difference between the approaches of government and market is that for governments each and every citizen has to be equally treated and equally looked after but markets deal with commodities, not citizens. Markets take masses merely as consumers of goods or suppliers of labor. As consumers, they appear if they have the purchasing power. The government has to look after as to how to inculcate purchasing power into masses. And as suppliers of labor, their value will be determined by the forces of supply and demand. Again here the government has to enable masses in such a way that they are accepted as workers in the economy. The role of government has become more dynamic and the interdependence between these two much more strategic and important. As Sen(1995)²⁴ is of the view that it is not the failure of the market that the social sector has failed to develop, rather it is the failure of the policy making which is of the view that markets will take care of each and everything as market does certain things and abstains from others. Markets do create opportunities, and increase incomes and creates many avenues which can be harnessed for the larger good of society. But the

government has to ensure that the growth process is equitable and inclusive.

6 (II) SUGGESTIONS:

India's strategy has to be two fold: markets must be allowed to flourish where they work best, namely in production of manufactured goods and services, but government resources must increasingly concentrate on areas that are typically ill-served by markets: mass education, public health, rural roads, irrigation and agricultural research. Neither a more vigorous embrace of market alone, nor a return to pre-1991 policies, will do the job.

The access of the poor and the unemployed to the social and physical infrastructure has to expand by creating opportunities, improving the quality of life and empowering the poor to be a part of the growth process. We need to create opportunities for the poor. Creating opportunities leads to developing a broad-based growth. For this we need to increase the asset base of the poor by say, investment in projects that secure access to quality education and health services such as targeted Human Development Programmes that help poor families keep their children in school and provide them with regular health care. We must promote the creation and development of markets also by improving access to geographically inaccessible areas through investment in physical infrastructure, increasing the linkages between the rural economy and the industrial sector through support of micro enterprises

and ensuring a positive cooperation between the local and multinational enterprise so that growth doesn't happen by cutting throat of others but by spreading more branches.

This requires a suitable macroeconomic framework with policies that support reasonable fiscal deficits, realistic and stable exchange rates, low inflation along with investments in human and social assets like proper schooling, secured nutrition, proper health care and sanitation, rural credit, rural infrastructure and many others. By providing social protection like targeted subsidies to the poor, food for work programmes, unemployment relief we can minimize the vulnerability of the poor. Also the poor have to be involved in the decision making process and its implementation through community participation. This transparency and accountability will lead to better policies with wider public support as in this case the public expenditures could be better managed and could be a cross check for social and economic inequality and corruption. There is also need to advance the reform of institutions for the delivery of health, education and judicial services and to improve the management capacities of government to enhance their accountability and make them more responsive to the needs of the poor. Further, acceleration in economic growth and reduction of poverty will need greater investment and employment growth along with enhancement of productivity. For such acceleration to take place we will need a significant enhancement of growth in capacity

building and in the availability of public services that the private sector cannot provide.

I, therefore, believe that just as the first generation of reforms empowered the private sector to perform as it can to the limits of its abilities, the second generation of economic reforms must focus on a similar empowerment of the public sector to deliver public goods and services for the benefit of all segments of the private sector, corporate entities and the public alike. I would like to take up seven areas, by way of illustration, where we need to give focus attention and which I believe can mainly be done by the public sector, even if some of it is to be delivered through public private partnership.

The seven areas that I propose to address are: agricultural development, human resource development particularly education, management of public services, local governments, non-government organizations, state reforms and good governance.

(i) Agricultural Development:

One of the most disturbing features of the recent growth experience has been that of the deceleration in agriculture growth. With more than fifty per cent of the population still largely dependent on agriculture, this deceleration has clearly had a significant impact on slower reduction in poverty levels than otherwise would have been the case. Moreover, for aggregate annual GDP growth to be a double digit growth on a sustainable basis it will be difficult if agricultural growth

itself does not exceed 4 per cent annual growth. Higher agriculture growth will also lead to faster increases in rural household incomes giving rise to greater demand for goods and services in rural and urban areas alike, which would be employment promoting.

The need now is for a corresponding second agricultural revolution, but one that will have to be much more heterogeneous and this revolution has to focus on the rain fed area particularly. With the increasing diversification of the Indian diet, there is great potential for acceleration of growth in the production of all non-cereal foods, though in varying degrees. There is need for a new agricultural revolution in all areas such as: dairying, horticulture, aquaculture and pisciculture, poultry, meat, and even wineries. The potential in all these areas is massive for income and employment generation on a well distributed basis; for generation of a host of new activities; and for widespread innovation.

This could be done through decentralized packages for many activities that will have to be regionally disaggregated and each package will need to make simultaneous provision for technology inputs, infrastructure, supply of inputs and associated credit delivery. Whereas the packages will need to be diverse and decentralized, it is unlikely that they will be developed without the initiation of a nationwide coordinated programme on a mission basis. Such a programme could form expert teams for each activity and location. It will be essential to bring together

is in this context that I have talked about the empowerment of the public sector in all its aspects, but particularly related to competence.

(ii) Improving Education:

If India is to compete in the world, its labour force also will have to be better educated and technically trained. The future will essentially need a skilled labour force. It is now well known that there has been noted deterioration in the public education systems in most parts of India. The performance of public primary schools has been widely brought into question. What needs equal attention, however, is the quality of education, which would emerge if there is greater local accountability of the school system and greater local involvement in general. Teachers need to be incentivised and better trained; and teaching materials have to be provided and improved. Clearly, these problems are the most pronounced in the poorest parts of the country that are also underserved in terms of basic infrastructure like power, rural roads and communications. A great deal of innovation and experimentation is going on but much remains to be done. Whereas there should be no doubt that the state retains primary responsibility for ensuring primary education to all, there can be many different ways of delivering it, including the involvement of non-government schools of different descriptions. In the field of higher education India has made rapid progress with the private sector initializing many a new centers of excellence. But the success of a few elite institutions such as Indian

Institutes of Technology (IITs) and Indian Institutes of Management (IIMs) have over shadowed the general lack of quality in Indian higher education. We must recognize urgently that there is great need to improve the quality of our colleges as well as universities in terms of facilities, laboratories, libraries, and most importantly, faculty - along with significant expansion of quantity. Side by side India has to evolve an organized approach that makes vocational training respectable, demand oriented and with great local involvement and accountability. The effort will have to involve extensive industry participation at the local level so that the training imparted is seen as relevant by prospective employers. As with the new requirements for agricultural extension systems, the systems for vocational training will need to have great heterogeneity in both the kind of training to be imparted but also how the training to be organized, accordingly to the different needs in the widely disparate regions of India. We also need to recognize that service occupations need organized training as well. One can illustrate this by the long time recognition of training needs in the hotel industry and how the private sector itself has set up a large number of excellent training institutions. Similar has been the case in information technology where many private sector training institutions emerged as demand started rising. Hence, this is clearly an area that is most well suited for public private partnerships. Once again, however, the organization of public private partnerships also involves a great deal of organizational capacity in the

public sector, which designs delivery systems in a way that they spawn efficiency, productivity and innovation.

Overall, there is no way by which we can attain and sustain a two digit growth unless the whole education system, primary, secondary, vocational and higher is revamped. The State must bear the responsibility for ensuring that this happens, but must organize it in such a way that the best entrepreneurial energies that are now manifesting in the country are also harnessed towards the cause of education.

(iii) Delivery of Services:

We find highly modern convent schools with school going children carrying laptops along with their bags but no body cares about the poor municipal school which doesn't even have one computer. Underground metros and flyovers are being constructed but no one cares about the shattered bus that goes to the nearby village. Cell phones are in many hands but what about the old landline going to a slum area. Big chains of hospitals are there but what about the government hospital. Its not that India doesn't have schools or it doesn't have roads or it doesn't have water taps or it doesn't have electricity. The problem is that classes are not held, the roads direly need repairs, there is no water supply and there is a lot of load shedding. Education systems, health systems, hospitals, water supply systems, sewerage systems, public lighting and public transportation all are in a dire need of efficient and innovative

management. The key issue is that of efficient delivery of public services, and in India particularly, at affordable prices.

This problem has to be tackled on various aspects. For example, in case of electricity, the government has to ensure that there is an adequate supply of electricity, where ever needed dams have to be constructed, the dam has to be technically sound and the displaced properly rehabilitated and the common man has to ensure that electricity is properly used and user charges paid. Another related factor is the management of these institutions. Ironically although India at the moment home to a huge population of engineers and management graduates still no one wishes to work for government. The reason being, if you pay peanuts, you get monkeys. It could be argued that the government doesn't have enough money but India would be much wealthier if it cuts on the expenditure of politicians and bureaucrats or cutting down on the irrational subsidies. We need to make public service prestigious again: not for the exercise of power and authority, but for tackling challenges for efficient public service delivery. Another way out is to have public private partnerships. The challenge is to design appropriate incentive systems so that the ultimate objective gets aligned. Different sectors will need different forms of partnerships. In education, for example, the partners could well be non-profit non-governmental organizations. In ports and airports, the partners could clearly be profit seeking private companies.

(iv) Local Governments and Decentralization:

The process of centralized planning has led to the perpetuation of dependence to the lowest level and inhibited their capacity building. The Planning Commission would do well to train local officials in financial planning and management, project choice and evaluation techniques and let local officials make informed decisions about spending to benefit their communities. Overtime local officials should replace state government employees for many a governmental tasks which are devolved to local level. The reallocation of public sector staff at the local level should also be used as an opportunity restructure the person system that it provides better incentives to those who deliver services, reward good performance, punish fraud and make information available that lets consumers and voters make better choice. Local governments should be given block grants, and the freedom to decide how to spend them, but with monitorable outcome targets. This is totally in contrast to the current approach, which reduces local governments to agencies of the governments. If the Planning Commission really wants changes to happen then it has to work with the Finance Commission to build local government's capacity for budgeting, accounting and bench marking. Note that equity concerns can be met by making per capita grants inversely related to the backwardness of the area. The need to meet outcome targets will presumably act as a check on the incentive to remain backward.

Overall, job creation particularly rural employment is an essential need. Simply making sure that people are looked after when in dire straits or brought up to basic literacy, is hardly a recipe of inclusive growth. The masses need to be given income earning skills and the opportunities to use them. There is a systematic failure, due to lack of vision and implementation. Much of the required training has to come from the private sector. The government is simply not financially or administratively equipped to fulfill this role, but it constraints the private sector needlessly. Allowing local governments to pursue partnerships with the private enterprise for expanded education opportunities will help here. The role for the government and the Planning Commission would be in providing simple guidelines, certification mechanisms and quality rankings.

If India's young people can be given good vocational or practical training on a much larger scale, then an important question arises as to where will these people be placed. Definitely, new businesses have to grow to hire these people. At present, setting up and running a business in India is needlessly difficult and costly. In addition, financing is difficult. Local governments, at the level of small towns and above need to be given the policy tools to compete in new businesses. This will require decentralization of land use and licensing decisions from the state level, just as earlier reforms saw the decentralization from the centre to the states. If the traditional banking sector is unable to make

loans effectively, new private sector entrants must be encouraged. Administrative process for regulating business must be streamlined. The Planning Commission can develop guidelines here, and even fund local capacity building that will help localities to shape policies for job creating economic environment.

(v) State Level Reforms:

During these days when privatization, liberalization and globalization are a reality the most crucial area where the state policy can help to catalyze development is to provide basic economic and social infrastructure. The reason why the backward states are backward is basically due to lack of infrastructure facilities. Because of the constitutional division of powers between the Centre and the States, some of the infrastructure needs fall exclusively in the area of the central government e.g. railways, national highways, telecommunications, major ports and airports. Infrastructure needs in these sectors must be met either directly through increased central public investment or when private investment is also feasible, by a combination of public and private investments. However, a large part of what is needed by way of infrastructure in individual states either falls in the exclusive area of responsibility of the state government like irrigation or in what is described in the Constitution as the concurrent list as is the case for education and electric power. Both the Centre and the states can legislate in these areas and state laws must be consistent with Central

laws, but the delivery system in practice is generally in the hands of the state government.

State governments are also responsible for many of the critical infrastructure requirements of industrial and commercial development. The availability of power at an appropriate price and of acceptable quality is a critical requirement for industrial and commercial development and this is also a state government responsibility. The generation transmission and distribution of power in all the major states is a state monopoly operated by the State Electricity Boards (SEBs). The financial position of the SEBs has deteriorated massively over time because of a combination of operational inefficiency and irrational electricity pricing, with very low electricity tariffs for farmers and household consumers which are cross subsidized by very high electricity tariffs on industrial and commercial users. Operational inefficiencies are particularly marked in distribution where corruption is widespread leading to under-billing for electricity consumed. The resulting financial difficulties of SEBs have led to inadequate investment in both generation and distribution, leading in turn to power shortages, erratic voltage and unreliable supply. Major reforms in the power sector are desperately needed in all states to bring about rational tariff fixation and create stronger incentives to improve efficiencies at all levels.

Urban infrastructure is also an important pre-condition for attracting private investment especially foreign investment. This too is

entirely a state government responsibility and the slow growing states suffer from a severe competitive handicap in this area. Improvements in urban infrastructure must therefore be an area of priority attention for state governments wishing to attract private investment.

The total resources devolved from the Centre to the states in the form of the statutory devolution of the states share of central taxes and special grants recommended by the Finance Commission, together with the flow of central assistance in support of state plans through the Planning Commission, already add up to a substantial amount and the central government's fiscal position does not allow any significant expansion in these flows. Given the central government's evident compulsion to reduce its own fiscal deficit, there is obviously little scope for increasing the total flow of resources to the states. However, there is room to re-orient the expenditure undertaken by the centre in a manner that provides greater developmental support to the states, especially the poorer states. At present, a very large volume of resources under the direct or indirect control of the Central government is devoted to various types of poverty alleviation programmes and other programmes involve under-pricing of certain goods and services based on cross-subsidization from other parts of the system e.g. a subsidy on kerosene which is financed by overpricing petrol or subsidy to railway passengers financed by overcharging freight. Although these amounts are cross-subsidized by other parts of the system they can become available as additional

resources if user charges are raised to eliminate the need for cross-subsidy, and the resources thus released are mopped up through taxation. The total amount involved in these subsidies exceeds the total central assistance provided by the central government to the states in support of their plans. If these programmes could be reduced in scale by even half, the resources so released could be used to expand central assistance to the states to be used for infrastructure development. Eliminating subsidy programmes is not easy, but all the available evidence suggests that the effectiveness of the existing programmes is extremely limited and the same resources would be much better spent in building infrastructure. There is little doubt that such a reallocation would strengthen the development prospect of the poorer states, and make a much bigger contribution to poverty reduction in the country.

A related issue, which has not received the attention it deserves, is the scope for improving the development effectiveness of Central assistance to the states by linking it to performance. At present, most of the central assistance provided to support state plans is not subject to specific performance criteria or conditionality. It can be argued that such assistance would be more effective if it is linked to policy reforms and other specific performance criteria that would be designed to address the factors that constrain the growth performance of the states. Advocates of federal autonomy and decentralization will no doubt object to the suggestion on the grounds that resources should be provided on the

basis of an entitlement criterion and accountability for the use of these resources should be left to the normal political process at state level. However, this approach also implies that the Centre can have no particular responsibility to ensure that the specific constraints to growth at the state level are effectively addressed. Microfinance can be very important in this respect.

(vi) Non Governmental Organizations:

With the failure of the state and the markets these organizations assume huge importance as these can be instrumental in furthering proper inclusive growth. These organizations stimulate voluntary action among the served community and progressively involve enlightened individuals belonging to the served community in the higher echelons of its decision making machinery. Working on no profit and no loss basis and keeping in view simple charity, it supplements the welfare function of the state. It particularly increases the awareness and encourages people's participation for the benefits of the society. The beauty of it is that it involves people in programme planning, raises resources, implements activities and finally shares the fruits of development. The NGOs at present adopt a target group approach, but aim at the self-reliance of the people they are serving. Once they have been able to assist a target group to become reasonably autonomous in their socio-economic status they move on to another target group suffering from

backwardness. This enables them to serve a large segment of the community. Of late NGOs have started specializing in particular services.

The main characteristic of NGO is 'human touch' which is a quality innate in a human being and cannot be developed with any amount of training or incentive. But this particular quality is getting gradually eroded with the introduction of professionalism which is replacing volunteerism. Still these organizations are open, non-bureaucratic and more importantly close to the community where it works. The idea behind is to think globally but to act locally. NGOs are and could be further helpful in education, health and medical services, population control and family welfare, disaster relief and rehabilitation and for furthering the welfare of slum children, women, handicapped, SCs and STs. It can also play vital role in consumer protection, agricultural extension services, environment, training and legal aid etc. but all is good till when these NGOs are not influenced by vested interests other than welfare.

(vii) Governance:

Good governance affects growth in several ways. First, it has a direct impact on the effectiveness with which public sector developmental programmes in the state are implemented. Poor administration and corruption, which are in fact related to one another, are now widely recognised as major problems reducing the effectiveness of many government programmes. Since additional public investment in the

infrastructure and social sectors is an important part of the growth acceleration strategy for poorer states, it follows that parallel improvements in governance at the state level are needed to ensure that the resources provided for this purpose are well spent. In many cases, improving the effectiveness of public expenditure requires decentralized control over the programmes with much greater people's participation. There are many successful examples of decentralization in states such as Kerala, Karnataka, Andhra Pradesh and Madhya Pradesh. These experiments need to be replicated in the slower growing states such as Uttar Pradesh, Bihar and Orissa.

Another channel through which the quality of governance at the state level can stimulate growth is by making the policy environment more business friendly. While the economic reforms have reduced the burden of Central government controls on investment activity, there is need to introduce similar liberalization at the state level. Entrepreneurs setting up an industrial unit typically need several separate permissions from various state government departments responsible for state level clearances, e.g. those related to environment regulations, labour welfare regulation, utilities, health, sanitary and safety inspection, sales tax, etc. Each interface with a separate part of the bureaucracy subjects the entrepreneur to the triple vicissitudes of harassment, delay and corruption. The high transactions costs are particularly onerous for small business, which is precisely the group which most state

governments are otherwise keen to promote. One of the positive developments in recent times is that many states have taken initiatives in this area and have introduced simplified procedures and one-window arrangements to improve the business climate. However, these experiments are relatively recent and the lead has been taken by the better performing states. The poorer performing states have generally lagged far behind the others in this dimension. Sweeping reform of these regulatory systems at the state level is needed.

The law and order situation is another aspect of governance at the state level that is relevant for creating an environment conducive to investment. There are no objective measures to assess performance in this dimension, but impassionate evaluations suggest that the slower growing states suffer from more than the usual problems in this dimension. Tensions associated with economic and caste stratification in parts of the country especially in rural areas have created disturbed conditions in some of the slow growing states which is bound to have an impact on developmental activity. It is difficult to imagine any significant acceleration in economic growth without a significant improvement in this aspect of governance.

For the governance to be successful among all other things the most important is transparency. In view of this the recent Right to Information Act is a positive step. Their basic remedy is the separation of economics and politics. The culture in India is such that if the Central

government raises the prices of petrol in light of increasing international prices, the very next day there would be an all India strike. The state government which dares to cut the subsidies on power, which economically is a highly rational decision, will never come to power again. The remedy for this is that the government should be made accountable. There is no dearth of development programmes and benefit measures for poor are regularly announced, but there is no one to question about the proper implementation of the programme. The government and the institution is least threatened by the improper implementation as its success depends on vote bank politics which banks on caste, religion and regional politics. The way to achieve this is to separate bureaucracy from politics. There should be a check on policy making and its implementation. The idealistic view is that the common man should be empowered enough to raise their voices against failure of state. As illiteracy and vote bank politics has failed in choosing and checking governments the bureaucracy should be made strong and independent enough to rationally facilitate the development process. This is indeed a strong step but is surely the shortest route to success.

6 (III) A TEN POINT PROGRAMME:

What ever that has been discussed above, has been suggested from time to time by many researchers and analysts. But the problem is that the problem remains. It seems that a vicious circle of underdevelopment is operating in the economy. Poverty is leading to lack of capability to

learn and unemployment; unemployment is leading to poverty; poverty, illiteracy and lack of avenues is leading to frictions and hopelessness in the society, which is being exploited by the politicians for the vested interests of the rich and the influential and when vested interests are working the cause of the poor and underprivileged are bound to suffer. In view of the above discussion, this study recommends a ten point approach:

- i. Public-private partnerships
- ii. Rain fed area agriculture
- iii. Micro finance
- iv. Vocationalisation of education
- v. Improving delivery of services and infrastructure
- vi. Strengthening accountability of institutions and governments.
- vii. Attracting physical and human capital to public sector
- viii. Increasing self sustaining decentralization
- ix. Cutting on uneconomical subsidies and other populist measures
- x. Separating politics and bureaucracy and improving governance.

6 (IV) RELEVANCE OF PLANNING IN THE PRESENT SCENARIO:

It is rather ironical that a country which launched its development programme in the framework of planning would have now reached a state where the relevance of planning itself is being questioned. If the role of government is to take decisions at the centre for allocation of

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6 (IV) RELEVANCE OF PLANNING IN THE PRESENT SCENARIO:

It is rather ironical that a country which launched its development programme in the framework of planning would have now reached a state where the relevance of planning itself is being questioned. If the role of government is to take decisions at the centre for allocation of

resources and distribution of this package of decisions to the various implementing agencies both at the micro level and at the macro level, then the role of government is certainly going to change in the changed economic environment. India started with planning in a mixed economy framework which was an innovative mixture of the public sector and the private sector, market and the state, private profits and social welfare, physical controls and fiscal incentives. This heterogeneous feature changed over time, as the State along with the public sector and the bureaucracy increased in a disproportionately more authoritative manner and thereby destroyed the true nature of dualism in decision making. Gradually the need and the desire to perform disappeared and finally it so happened that the economy lost its dynamism and it became a symbol of inefficiency, indifference and in-competitiveness. To make matters worse the growing nexus of the policy makers and the vested interests, created a rigid institutional framework for policy implementation leading to an increase in the tendencies of excessive dependence on the State which ultimately led to a loop sided and non inclusive growth and the role of government as a catalyst and stimulator for inducing development deteriorated.

With growing integration of the national economies with the international process the need for analytical studies aimed at identifying the strategies for fostering national interests have increased significantly. This need is being increasingly felt in the context of our negotiations with

the WTO and also at different international levels. With increasing globalization and liberalization, the compulsions of examining the implications of the different policy options for the national economy have significantly increased. The government must play an effective role in not only providing technical study base and analytical support to the different economic ministries of government but also in bringing about more effective coordination of the policies and perceptions of the different ministries of the government. The government must play the role of synergizing these different approaches and perceptions for evolving a coordinated national strategy and strictly look into the fact that different ministries and departments have a coordinated approach to the different issues of development, be it at national level or at international level.

One of the problems of the process of development in our economy has been the inadequacy of sectoral growth balances. The government should look into the fact that proper consistency models are prepared to work out a profile of growth rate for the different sectors. Since the process of implementation of the programmes by the different ministries and also in the private sector did not conform to these inter sectoral consistencies of the country landed up in a situation of bottlenecks and inadequacies of infrastructure and other services. The government will have to undertake specific analytical studies and monitor the profile of inter-sectoral consistency in the economy, including the crucial but often neglected, problem of fostering consistency between the profiles of growth

of the real sector and financial sectors of the economy, the tasks of balancing the revenue and expenditure etc.

Although in the present scenario market mechanism has to be used to promote optimum utilization of resources, but there are areas where planning has to assume direct responsibility. Planning is needed for creating social infrastructure and for human development in the sphere of education, health and scientific research. The private sector is not yet capable of taking care of the entire needs of the society, particularly the poor and the weak. The market mechanism may be able to bring equilibrium between demand and supply, but it will not be able to bring forth a balance between need and supply. Planning is necessary to take care of the poor and weak who have little or no asset endowment to benefit from growth as there is every danger that in the market determined environment the social aspects would be marginalized.

6 (V) CONCLUDING REMARKS:

Reducing poverty and unemployment calls for a three pronged approach: promoting pro-poor growth, securing social development and ensuring good governance. Interestingly, all these are interrelated as pro-poor growth stimulates employment and other economic opportunities and generates revenues which can be directed through good governance at providing services needed by the poor and vulnerable groups.

Economic growth needs to be broad based and labor absorbing, providing jobs and economic opportunities for self employment- a

challenging task, because industries need to be internationally competitive as well. This requires diversified industrial and service sectors and the networking of international and local enterprises of different sizes to enhance synergism between different economic segments, a supportive policy framework needs to be complemented by investments in human, physical and financial capital, particularly of the poor, to aid their integration into the main stream of social and economic development. These measures need to be chosen and designed with greater involvement of the public at large and the poor in particular, to ensure their effectiveness and sustainability.

Government also has its own role to play. It needs to create an environment that stimulates growth and private sector development ensures efficient public resource management and delivers basic services and infrastructure. They also need in cooperation with the society and the business community to strengthen social cohesion as the more affluent increasingly tends to have an international outlook and less in common with the poorer parts of their own countries. However, shifting the role of government overtime, from producer cum regulator to facilitator cum regulator is a complex understanding. Introducing concepts of participation and inclusive development requires responsive governments, as well as citizens able to contribute constructively to public debate and the decision making process.

The economic reforms process carried out in India since 1991 has brought forth a burst of new entrepreneurial energies in almost all sectors. As a consequence, the country is now recording substantial economic growth in excess of 8 per cent. This growth could possibly be constrained by the lack of both quality and quantity of public services supplied by the Government and its various authorities. Hence there has to be all-round improvement in investment and delivery of public services. While privatization, liberalization and globalization may alleviate poverty and unemployment in those societies which have done their homework well and have completed the prerequisites of sustaining and spreading growth, it leads to marginalization and unequal growth in others. It can be hardly denied that economic benefits of these policies remain highly concentrated in the industrialized countries while others particularly the developing countries turn up at the losers end. Globalization particularly might lead to increased income and technology gaps as all nations are not equally likely to benefit from it. It ultimately leads to social fragmentation by creating high-income opportunities for the fully integrated and rich groups while the losers are the working poor who don't have access to these opportunities. Now our priorities should be to manage this social dualism between the integrated and excluded ones. The problem entirely doesn't lie with the reforms; rather the problem is with the approach of taking these reforms as the end rather as the means to a broader end. Reforms, only for the sake of reforms is

not wanted rather reforms are needed for growth cum development. India's development strategy during the reform period is based on a rather updated version of the age old trickle down hypothesis which concentrates only on the core policies of stimulating growth and strengthening market forces and the biggest lacking of it are non-inclusiveness and non-participation. These policies could be beneficial from a broad social viewpoint given the structural reforms have been designed in such a way that the fruits of growth spread out to all parts and percolates to all layers of the society. In other words, social targeting policies could aid in further economic growth. This can be summarized as a development-growth-development spiral. Also, participation is important as it gives a sense of ownership of a successful economic transformation as it reduces resistance, facilitates consensus building and gives the strength to bear the pain of transition. The new focus of economic reforms has to be the empowerment of the public sector to do what it is supposed to do, that is, public services. In addition to the call for real decentralization the Planning Commission has to play the role of a provider of expertise and not that of a pure decision maker. It is as if the reform processes itself needs to be reformed. To summarize it in the words of Nobel laureate Amartya Sen "We must not make the mistake-common in some circles-of taking the growth rate of GNP to be the ultimate test of success, and of treating the removal of illiteracy, ill health etc., as- at best-possible means to that hallowed end.....In

this sense, it is perhaps a mistake to see the development of education, health care, and other basic achievements , only or primarily an expansion of human resources'- the accumulation of 'human capital'-as if people were just the means of production and not its ultimate end".²⁵

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APPENDIX-1

(i) Regression equation for GDP growth of the period 1980-81 to 1989-90

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	T.S, ^a S.S, P.S		Enter

a. All requested variables entered.

b. Dependent Variable: GDP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999 ^a	.998	.996	.13578

a. Predictors: (Constant), T.S, S.S, P.S

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.878	3	15.293	829.546	.000 ^a
	Residual	.111	6	.018		
	Total	45.989	9			

a. Predictors: (Constant), T.S, S.S, P.S

b. Dependent Variable: GDP

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.468E-02	.261		.210	.841
	P.S	.368	.010	.952	37.750	.000
	S.S	.279	.023	.292	12.262	.000
	T.S	.309	.039	.211	7.968	.000

a. Dependent Variable: GDP

APPENDIX-2

(b) Regression equation for GDP growth of the period 1990-91 to 1999-00

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	T.S, ^a S.S, P.S	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.997 ^a	.995	.992	.16063

a. Predictors: (Constant), T.S, S.S, P.S

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.706	3	10.235	396.703	.000 ^a
	Residual	.155	6	.026		
	Total	30.861	9			

a. Predictors: (Constant), T.S, S.S, P.S

b. Dependent Variable: GDP

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.699	.273		-2.564	.043
	P.S	.348	.019	.656	18.117	.000
	S.S	.284	.016	.573	17.882	.000
	T.S	.480	.033	.519	14.683	.000

a. Dependent Variable: GDP

APPENDIX-3

(c) Regression equation for GDP growth of the period 2000-01 to 2005-06

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	T.S, ^a P.S, S.S		Enter

a. All requested variables entered.

b. Dependent Variable: GDP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999 ^a	.998	.995	.15044

a. Predictors: (Constant), T.S, P.S, S.S

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.603	3	7.868	347.629	.003 ^a
	Residual	.045	2	.023		
	Total	23.648	5			

a. Predictors: (Constant), T.S, P.S, S.S

b. Dependent Variable: GDP

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.227	.348		-.653	.581
	P.S	.265	.014	.664	19.306	.003
	S.S	.249	.037	.307	6.647	.022
	T.S	.551	.066	.400	8.326	.014

a. Dependent Variable: GDP

APPENDIX-4

Table 1: Number & Percentage of Population below Poverty Line (1973-74)

STATES/UTS	RURAL		URBAN		COMBINED	
	No. of Persons (Lakhs)	Persons (%)	No. of Persons (Lakhs)	Persons (%)	No. of Persons (Lakhs)	Persons (%)
Andhra Pradesh	178.21	48.41	47.48	50.61	225.69	48.86
Arunachal Pradesh	2.57	52.67	0.09	36.92	2.66	51.93
Assam	76.37	52.67	5.46	36.92	81.83	51.21
Bihar	336.52	62.99	34.05	52.96	370.57	61.91
Goa	3.16	46.85	1	37.69	4.16	44.26
Gujarat	94.61	46.35	43.81	52.57	138.42	48.15
Haryana	30.08	34.23	8.24	40.18	38.32	35.36
Hiraachal Pradesh	9.38	27.42	0.35	13.17	9.73	26.39
Jammu & Kashmir	18.41	45.51	2.07	21.32	20.48	40.83
Karnataka	128.4	55.14	42.27	52.53	170.67	54.47
Kerala	111.36	59.19	24.16	62.74	135.52	59.79
Madhya Pradesh	231.21	62.66	45.09	57.65	276.3	61.78
Maharashtra	210.84	57.71	76.58	43.87	287.42	53.24
Manipur	5.11	52.67	0.75	36.92	5.86	49.96
Meghalaya	4.88	52.67	0.64	36.92	5.52	50.2
Mizoram	1.62	52.67	0.2	36.92	1.82	50.32
Nagaland	2.65	52.67	0.25	36.92	2.9	50.81
Orissa	142.24	67.28	12.23	55.62	154.47	66.18
Punjab	30.47	28.21	10.02	27.96	40.49	28.15
Rajasthan	101.41	44.76	27.1	52.13	128.51	46.14
Sikkim	1.09	52.67	0.1	36.92	1.19	50.86
Tamil Nadu	172.6	57.43	66.92	49.4	239.52	54.94
Tripura	7.88	52.67	0.66	36.92	8.54	51
Uttar Pradesh	449.99	56.53	85.74	60.09	535.73	57.07
West Bengal	257.96	73.16	41.34	34.67	299.3	63.43
Andaman & Nicobar	0.59	57.43	0.15	49.4	0.74	55.56
Chandigarh	0.07	27.96	0.77	27.96	0.84	27.96
Dadra & Nagar Haveli	0.37	46.85	0.01	37.69	0.38	46.55
Delhi	1.06	24.44	21.78	52.23	22.84	49.61
Laksbadweep	0.18	59.19	0.03	62.74	0.21	59.68
Pondicherry	1.61	57.43	1.13	49.4	2.74	53.82
India	2612.9	56.44	600.46	49.01	3213.36	54.88

Source: (i) Report of the Expert Group on Estimation of Proportion and Number of Poor, Perspective Planning Division, Planning Commission, New Delhi, July 1993.

(ii) Poverty Estimates For 2004-05, Press Information Bureau, Government of India, New Delhi, March, 2007

Note: 1. Poverty Ratio of Assam is used for Sikkim, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland & Tripura.

2. Poverty Ratio of Tamil Nadu is used for Pondicherry and A & N Island.

3. Poverty Ratio of Kerala is used for Lakshadweep.

4. Poverty Ratio of Goa is used for Dadra & Nagar Haveli.

5. Urban Poverty Ratio of Punjab is used for both rural and Urban poverty of Chandigarh.

6. Poverty Line of Maharashtra and expenditure distribution of Goa is used estimate poverty ratio of Goa.

APPENDIX-5

Table 2: Number & Percentage of Population below Poverty Line (1977-78)

STATES/UTs	RURAL		URBAN		COMBINED	
	No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)	% of Persons
Andhra Pradesh	149.13	38.11	48.41	43.55	197.54	39.31
Arunachal Pradesh	3.26	59.82	0.1	32.71	3.36	58.32
Assam	97.55	59.82	5.83	32.71	103.38	57.15
Bihar	364.48	63.25	37.34	48.76	401.82	61.55
Goa	2.72	37.64	1.16	36.31	3.88	37.23
Gujarat	92.53	41.76	38.35	40.02	130.88	41.23
Haryana	26.43	27.73	9.05	36.57	35.48	29.55
Himachal Pradesh	12.46	33.49	0.58	19.44	13.04	32.45
Jammu & Kashmir	19.04	42.86	2.68	23.71	21.72	38.97
Karnataka	120.39	48.18	47.78	50.36	168.17	48.78
Kerala	102.85	51.48	24.37	55.62	127.22	52.22
Madhya Pradesh	247.98	62.52	54.89	58.66	302.87	61.78
Maharashtra	249.75	63.97	80.16	40.09	329.91	55.88
Manipur	6.09	59.82	0.97	32.71	7.06	53.72
Meghalaya	6.1	59.82	0.69	32.71	6.79	55.19
Mizoram	2.03	59.82	0.28	32.71	2.31	54.38
Nagaland	3.44	59.82	0.3	32.71	3.74	56.04
Orissa	162.5	72.38	13.82	50.92	176.32	70.07
Punjab	18.87	16.37	11.36	27.32	30.23	19.27
Raj as than	89.66	35.89	27.22	43.53	116.88	37.42
Sikkim	1.41	59.82	0.13	32.71	1.54	55.89
Tamil Nadu	182.5	57.68	72.97	48.69	255.47	54.79
Tripura	9.95	59.82	0.66	32.71	10.61	56.88
Uttar Pradesh	407.41	47.6	96.96	56.23	504.37	49.05
West Bengal	259.69	68.34	50.88	38.2	310.57	60.52
A & N Island	0.71	57.68	0.2	48.69	0.91	55.42
Chandigarh	0.08	27.32	0.95	27.32	1.03	27.32
Dadra & Nagar Haveli	0.33	37.64	0.16	36.31	0.49	37.2
Delhi	1.35	30.19	16.81	33.51	18.16	33.23
Lakshadweep	0.13	51.48	0.07	55.62	0.2	52.79
Pondicherry	1.65	57.68	1.35	48.69	3	53.25
India	2642.47	53.07	646.48	45.24	3288.95	51.32

Source: (i) Report of the Expert Group on Estimation of Proportion and Number of Poor, Perspective Planning Division, Planning Commission, New Delhi, July 1993.

(ii) Poverty Estimates For 2004-05, Press Information Bureau, Government of India, New Delhi, March, 2007

Note: Same as Appendix 4

APPENDIX-6

Table 3: Number and Percentage of Population below Poverty Line (1983)

STATES/UTs	RURAL		URBAN		COMBINED	
	No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)	% of Persons
Andhra Pradesh	114.34	26.53	50.24	36.3	164.58	28.91
Arunachal Pradesh	2.7	42.6	0.12	21.73	2.82	40.88
Assam	73.43	42.6	4.26	21.73	77.69	40.47
Bihar	417.7	64.37	44.35	47.33	462.05	62.22
Goa	1.16	14.81	1.07	27	2.23	18.9
Gujarat	72.88	29.8	45.04	39.14	117.92	32.79
Haryana	22.03	20.56	7.57	24.15	29.6	21.37
Hinachal Pradesh	7.07	17	0.34	9.43	7.41	16.4
Jammu & Kashmir	13.11	26.04	2.49	17.76	15.6	24.24
Karnataka	100.5	36.33	49.31	42.82	149.81	38.24
Kerala	81.62	39.03	25.15	45.68	106.77	40.42
Madhya Pradesh	215.48	48.9	62.49	53.06	277.97	49.78
Maharashtra	193.75	45.23	97.14	40.26	290.89	43.44
Man I pur	4.76	42.6	0.89	21.73	5.65	37.02
Meghalaya	5.04	42.6	0.57	21.73	5.62	38.81
Mizoraa	1.58	42.6	0.37	21.73	1.96	36
Nagaland	3.19	42.6	0.31	21.73	3.5	39.25
Orissa	164.65	67.53	16.66	49.15	181.31	65.29
Pun j ab	16.79	13.2	11.85	23.79	28.64	16.18
Raj as than	96.77	33.5	30.06	37.94	126.83	34.46
Sikkim	1.24	42.6	0.1	21.73	1.35	39.71
Tamil Nadu	181.61	53.99	78.46	46.96	260.07	51.66
Tripura	8.35	42.6	0.6	21.73	8.95	40.03
Uttar Pradesh	448.03	46.45	108.71	49.82	556.74	47.07
West Bengal	268.6	63.05	50.09	32.32	318.69	54.85
A & N Island	0.84	53.99	0.26	46.96	1.11	52.13
Chandigarh	0.09	23.79	1.1	23.79	1.19	23.79
Dadra & Nagar Haveli	0.16	14.81	0.02	27	0.18	15.67
Delhi	0.44	7.66	17.95	27.89	18.39	26.22
Lakshadweep	0.09	39.03	0.1	45.68	0.19	42.36
Pondicherry	1.56	53.99	1.72	46.96	3.28	50.06
India	2519.57	45.65	709.4	40.79	3228.97	44.48

Source: (i) Report of the Expert Group on Estimation of Proportion and Number of Poor, Perspective Planning Division, Planning Commission, New Delhi, July 1993.

(ii) Poverty Estimates For 2004-05, Press Information Bureau, Government of India, New Delhi, March, 2007

Note: Same as Appendix 4

APPENDIX-7

Table 4: Number & Percentage of Population below Poverty Line (1987-88)

STATES/UTs	RURAL		URBAN		COMBINED	
	No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)	% of Persons
Andhra Pradesh	96.38	20.92	64.05	40.11	160.43	25.86
Arunachal Pradesh	2.75	39.35	0.08	9.94	2.83	36.22
Assam	73.53	39.35	2.22	9.94	75.75	36.21
Bihar	370.23	52.63	50.7	48.73	420.93	52.13
Goa	1.31	17.64	1.65	35.48	2.96	24.52
Gujarat	74.13	28.67	48.22	37.26	122.36	31.54
Haryana	18.86	16.22	6.51	17.99	25.37	16.64
Himachal Pradesh	7.27	16.28	0.25	6.29	7.52	15.45
Jammu & Kashmir	14.11	25.7	2.85	17.47	16.95	23.82
Karnataka	96.81	32.82	61.8	48.42	158.61	37.53
Kerala	61.64	29.1	26.84	40.33	88.48	31.79
Madhya Pradesh	200.02	41.92	64.29	47.09	264.3	43.07
Maharashtra	186.89	40.78	107.38	39.78	296.27	40.41
Manipur	4.83	39.35	0.46	9.94	5.29	31.35
Meghalaya	5.18	39.35	0.3	9.94	5.48	33.92
Mizoram	1.46	39.35	0.25	9.94	1.7	27.52
Nagaland	3.49	39.35	0.18	9.94	3.66	34.43
Orissa	149.98	57.64	15.95	41.63	165.93	55.58
Punjab	17.09	12.6	8.08	14.67	25.17	13.2
Rajasthan	104.97	33.21	37.93	41.92	142.9	35.15
Sikkim	1.31	39.35	0.04	9.94	1.36	36.06
Tamil Nadu	161.8	45.8	69.27	38.64	231.07	43.39
Tripura	8.49	39.35	0.35	9.94	8.84	35.23
Uttar Pradesh	429.74	41.1	106.79	42.96	536.53	41.46
West Bengal	223.37	48.3	60.24	35.08	283.61	44.72
Andaman & Nicobar	0.83	45.8	0.26	38.64	1.09	43.89
Chandigarh	0.08	14.67	0.76	14.67	0.84	14.67
Dadra & Nagar Haveli	0.79	67.11	-	-	0.79	67.11
Delhi	0.1	1.29	10.15	13.56	10.25	12.41
Lakshadweep	0.07	29.1	0.1	40.33	0.17	34.95
Pondicherry	1.33	45.8	1.72	38.64	3.05	41.46
India	2318.79	39.09	751.69	38.2	3070	38.86

Source: (i) Report of the Expert Group on Estimation of Proportion and Number of Poor, Perspective Planning Division, Planning Commission, New Delhi, July 1993.

(ii) Poverty Estimates For 2004-05, Press Information Bureau, Government of India, New Delhi, March, 2007

Note: Same as Appendix 4

Poverty Line of Maharashtra and expenditure distribution of Dadra & Nagar Haveli is used estimate poverty ratio of Dadra & Nagar Haveli.

APPENDIX-8

Table 8: State-wise Population below Poverty Line in 1999-00

(7 day recall)

State/UT	Rural		Urban		Combined	
	No of persons (lakhs)	% of persons	No of persons (lakhs)	% of persons	No of persons (lakhs)	% of persons
Andhra Pradesh	48.14	9.15	55.96	24.48	104.1	13.79
Arunachal Pradesh	3.23	34	0.15	6.29	3.38	28.41
Assam	78.27	34	2	6.29	80.27	30.64
Bihar	322.96	38	43.64	29.23	366.6	36.69
Goa	0.23	2.8	0.4	5.03	0.62	3.9
Gujarat	36.87	12.2	24.8	13.76	61.66	12.78
Haryana	11.13	7.71	4.33	8.02	15.46	7.79
Himachal Pradesh	4.63	7.61	0.24	3.95	4.88	7.27
Jammu & Kashmir	3.1	4.14	0.42	1.7	3.52	3.53
Karnataka	47.02	13.64	39.35	22.33	86.36	16.58
Kerala	18.2	8.14	17.73	17.91	35.93	11.14
Madhya Pradesh	202.78	34.58	74.93	35.46	277.7	34.81
Maharashtra	109.25	20.71	96.81	25.23	206.05	22.61
Manipur	5.54	34	0.56	6.29	6.1	24.21
Meghalaya	6.7	34	0.29	6.29	6.99	28.75
Mizoram	1.19	34	0.38	6.29	1.57	16.5
Nagaland	4.42	34	0.24	6.29	4.66	27.73
Orissa	131.63	43.98	23.92	40.33	155.55	43.38
Punjab	8.53	5.31	4.03	5.4	12.56	5.34
Rajasthan	48.97	12.22	25.36	18.8	74.33	13.88
Sikkim	1.7	34	0.04	6.29	1.74	31.03
Tamil Nadu	73.19	18.68	45.81	20.27	119	19.26
Tripura	10.64	34	0.41	6.29	11.05	29.24
Uttar Pradesh	379.41	28.75	110.82	29.04	490.23	28.82
West Bengal	154.04	27.24	31.06	13.83	185.1	23.43
A & N Island	0.52	18.68	0.22	20.27	0.75	19.13
Chandigarh	0.06	5.4	0.42	5.4	0.48	5.4
Dadra & Nagar Haveli	0.26	15.31	0.02	10.89	0.28	14.84
Daman & Diu	0.02	2.8	0.04	5.03	0.05	3.92
Delhi	0.12	0.63	6.52	5.38	6.64	4.75
Lakshadweep	0.02	8.14	0.07	17.91	0.1	13.72
Pondicherry	0.58	18.68	1.62	20.27	2.2	19.83
All India	1713.35	24.02	612.57	21.59	2325.92	23.33

Source: Report of the Expert Group on Estimation of Proportion and Number of Poor, Perspective Planning Division, Planning Commission, New Delhi, July 1993.

Note: Same as Appendix 4

APPENDIX-9

Table 9: State-wise Population below Poverty Line in 2004-05

(MRP-Consumption)

State/UT	Rural		Urban		Combined	
	% of Persons	No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)
Andhra Pradesh	7.5	43.21	20.7	45.5	11.1	88.71
Arunachal Pradesh	17	1.47	2.4	0.07	13.4	1.54
Assam	17	41.46	2.4	0.93	15	42.39
Bihar	32.9	262.92	28.9	27.09	32.5	290.01
Chattisgarh	31.2	54.72	34.7	16.39	32	71.11
Delhi	0.1	0.01	10.8	15.83	10.2	15.83
Goa	1.9	0.13	20.9	1.62	12	1.74
Gujarat	13.9	46.25	10.1	21.18	12.5	67.43
Haryana	9.2	14.57	11.3	7.99	9.9	22.56
HP	7.2	4.1	2.6	0.17	6.7	4.27
Jammu & Kashmir	2.7	2.2	8.5	2.34	4.2	4.54
Jharkhand	40.2	89.76	16.3	10.63	34.8	100.39
Karnataka	12	43.33	27.2	53.28	17.4	96.6
Kerala	9.6	23.59	16.4	13.92	11.4	37.51
Madhya Pradesh	29.8	141.99	39.3	68.97	32.4	210.97
Mahaashtra	22.2	128.43	29	131.4	25.2	259.83
Manipur	17	2.86	2.4	0.14	13.2	3
Meghalaya	17	3.32	2.4	0.12	14.1	3.43
Mizoram	17	0.78	2.4	0.11	9.5	0.89
Nagaland	17	2.94	2.4	0.09	14.5	3.03
Orissa	39.8	129.29	40.3	24.3	39.9	153.59
Punjab	5.9	9.78	3.8	3.52	5.2	13.3
Rajasthan	14.3	66.69	18.1	10.5	17.5	107.18
Sikkim	17	0.85	2.4	0.02	15.2	0.87
Tamil Nadu	16.9	56.51	18.8	58.59	17.8	115.1
Tripura	17	4.7	2.4	0.14	14.4	4.85
Uttar Pradesh	25.3	357.68	26.3	100.47	25.5	458.15
Uttrakhand	31.7	21.11	32	7.75	31.8	28.86
West Bengal	24.2	146.59	11.2	26.64	20.6	173.23
A&N Islands	16.9	0.44	18.8	0.27	17.6	0.71
Chandigarh	3.8	0.04	3.8	0.36	3.8	0.4
Dadra&Nagar Haveli	36	0.62	19.2	0.16	30.6	0.77
Daman&Diu	1.9	0.03	20.8	0.14	8	0.16
Lakshadweep	9.6	0.04	16.4	0.05	12.3	0.09
Pondicherry	16.9	0.58	18.8	1.34	18.2	1.92
India	21.8	1702.99	21.7	682	21.8	2384.99

Source: Poverty Estimates for 2004-05, Press Information Bureau, GoI, New Delhi, March, 2007
Note: Same as Appendix 4

APPENDIX-10

(i) Correlation between GDP growth and Poverty Ratios

Correlations

		GDP	POVERTY
GDP	Pearson Correlation	1	-.901*
	Sig. (2-tailed)	.	.014
	N	6	6
POVERTY	Pearson Correlation	-.901*	1
	Sig. (2-tailed)	.014	.
	N	6	6

*. Correlation is significant at the 0.05 level (2-tailed).

(ii) Correlation between Net State Domestic Product and Poverty Ratios (1993-94)

Correlations

			GDP	POVERTY
Spearman's rho	GDP	Correlation Coefficient	1.000	-.098
		Sig. (2-tailed)	.	.615
		N	29	29
	POVERTY	Correlation Coefficient	-.098	1.000
		Sig. (2-tailed)	.615	.
		N	29	29

(iii) Correlation Coefficient between Net State Domestic Product and Poverty Ratios (1999-00)

Correlations

			GDP	POVERTY
Spearman's rho	GDP	Correlation Coefficient	1.000	-.076
		Sig. (2-tailed)	.	.696
		N	29	29
	POVERTY	Correlation Coefficient	-.076	1.000
		Sig. (2-tailed)	.696	.
		N	29	29

APPENDIX-11

(i) Correlation Coefficient between Net State Domestic Product and Poverty Ratios (2004-05)

Correlations

			GDP	POVERTY
Spearman's rho	GDP	Correlation Coefficient	1.000	.217
		Sig. (2-tailed)	.	.267
		N	28	28
	POVERTY	Correlation Coefficient	.217	1.000
		Sig. (2-tailed)	.267	.
		N	28	28

(ii) Correlation Coefficient between States ranked in terms of increase in State Domestic Product between 1993-94 and 2004-05 and the respective decline in state Poverty Ratios

Correlations

			GDP	POVERTY
Spearman's rho	GDP	Correlation Coefficient	1.000	-.462*
		Sig. (2-tailed)	.	.020
		N	25	25
	POVERTY	Correlation Coefficient	-.462*	1.000
		Sig. (2-tailed)	.020	.
		N	25	25

*. Correlation is significant at the .05 level (2-tailed).

(iii) Correlation between GDP Growth and Unemployment Rates (Principal Status and Subsidiary Status) for Rural Males

Correlations

		VAR00001	VAR00002
VAR00001	Pearson Correlation	1	.426
	Sig. (2-tailed)	.	.400
	N	6	6
VAR00002	Pearson Correlation	.426	1
	Sig. (2-tailed)	.400	.
	N	6	6

APPENDIX-12

(i) Correlation between GDP Growth and Unemployment Rates (Principal Status and Subsidiary Status) for Rural Females

Correlations

		VAR00001	VAR00002
VAR00001	Pearson Correlation	1	-.072
	Sig. (2-tailed)	.	.892
	N	6	6
VAR00002	Pearson Correlation	-.072	1
	Sig. (2-tailed)	.892	.
	N	6	6

(ii) Correlation between GDP Growth and Unemployment Rates (Principal Status and Subsidiary Status) for Urban Males

Correlations

		VAR00001	VAR00002
VAR00001	Pearson Correlation	1	-.871*
	Sig. (2-tailed)	.	.024
	N	6	6
VAR00002	Pearson Correlation	-.871*	1
	Sig. (2-tailed)	.024	.
	N	6	6

*. Correlation is significant at the 0.05 level (2-tailed).

(iii) Correlation between GDP Growth and Unemployment Rates (Principal Status and Subsidiary Status) for Urban Females

Correlations

		VAR00001	VAR00002
VAR00001	Pearson Correlation	1	-.318
	Sig. (2-tailed)	.	.539
	N	6	6
VAR00002	Pearson Correlation	-.318	1
	Sig. (2-tailed)	.539	.
	N	6	6